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PATTERNS OF CHARACTERISTICS OF AVID READERS

by

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Patterns of Characteristics of Avid Readers", submitted by Dennis William Cebuliak, in partial fulfilment of the requirements for the degree of Master of Education.

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ABSTRACT

This study, which was primarily explorative in intent and design, attempted to identify the traits and characteristics of children who showed a very high interest in reading. Ultimately, the identification of such traits may lead to an understanding of the factors of reading motivation, and thus remedial techniques for the noninterested (and often disabled) reader may be postulated.

Children who displayed a great propensity toward much reading activity were assumed to be highly motivated to read. Six of these "avid" readers from Edmonton were used in a pilot study which culminated in a main study consisting of 30 avid readers in grades two, four, and six from Leduc.

These 36 children were given a lengthy series of assessments which included: personality (self-concept, anxiety, and attitude), achievement motivation, creativity, intelligence; and additionally, other information was gathered from teachers, parents, and classmates.

From the wealth of data collected, several patterns of motivated readers were proposed, based upon the factors which eventually seemed the most relevant in describing avid readers: intelligence, social relations, creativity, self-concept, family relations, achievement, and anxiety.

The prevalence of left-handed subjects, the importance of the family interrelationships, and the significance of a positive and successful initial encounter with reading activities at the preschool and grade one age were some important findings related to reading motivation. Suggestions are proposed at the conclusion of the study for encouraging the development of motivation to read in children.

The results of the study indicated that there is no one pattern of motivated readers, and equally important, that even children of disadvantaged backgrounds may have the potential for becoming motivated toward reading activities.

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CHAPTER I

THE PROBLEM

I. INTRODUCTION

Research and therapy in the field of reading problems of children have grown immensely in recent years. Educators are beset with a multitude of remedial techniques to ameliorate the reading deficiencies of poor readers, and programs to benefit the poor reader are established commonly in contemporary classrooms and clinics. Very often a suggestion is made in reading assessment reports to motivate or interest the poor reader by presenting exciting (as opposed to routine) materials and activities, by inducing a pleasant and cheerful attitude (not tedious or solemn), and by developing through positive measures the self-concept of the poor reader.

If the disabled reader is motivated to engage in these remedial techniques, he will be a better reader for it. But if he refuses or is not inclined to even attempt such activities, no amount of cajoling, coercing, pleading, or threatening will induce him to participate. In the mind of the child, "You cannot make me if I don't want to!" Indeed, this is true. If the child does not want to read, if he is not interested in reading, if his interests lie elsewhere, then much time and energy have been wasted in planning that program.

On the other hand, however, if that child is highly motivated to attempt these remedial activities, then the program will likely be very beneficial for him.

Poor readers very often display a lack of interest in reading. They do not cherish the failures and unsuccessful activities they encounter. Vatcher (1970) and others since have outlined the studies which focus on the relationship between personality "maladjustment" and reading disabilities. That this relationship exists is not questioned.

Attempts to remedy the situation of the disabled reader fall largely into two areas -- changing the reading activities, and fostering the development of the reader's self-concept. Once the reader achieves success he begins to feel better about himself and about his ability to read. The pattern to develop the disabled reader's interest in reading is first to expose him to activities with which he can readily succeed.

One area in reading that lacks research is the motivation of readers, for surely if a disabled reader were motivated to read, he would have a much better chance to succeed at a remedial program than if he were not so motivated.

Since it has been the case that the emphasis in reading research has been on reading deficiencies, a paucity of information on capable, well-motivated readers has resulted. A classroom teacher who is faced with the question of how to motivate the uninterested readers will find little consolation in literature which focuses on the depreciating qualities of inferior readers. What little resources there are concerning developing a reading interest are largely suggestive, rather than experimental, and often deal with means of altering classroom activities (for example, see Flanigan, 1972; Gilmore, 1974), rather than attempting to foster a motivational growth within the child.

Little is currently known about reading motivation. It has been a factor in reading problems, but it has not been (to this writer's awareness) objectively assessed. In particular, there is a lack of research in identifying the motivational characteristics of readers, especially the ardent readers.

The problem of motivating the disabled reader still remains, and the answer may be found, in part, by examining the readers who display the motivation that disabled readers lack. Such readers who display this motivation in abundance are the avid readers.

In the classroom there are inevitably some students who are regarded by the teacher as good readers. There may also be found in the same classroom students identifiable as voracious readers, who consume much more reading material than their peers. The competent, achieving reader is not necessarily the one who reads extensively. The prolific reader is often assumed to have some traits different to those of the indolent reader. What often characterizes the voracious reader is a trait often labelled "high motivation", i.e., an intrinsic interest in reading.

If avid, voracious, fervent readers engage in reading activities to a great extent, then they surely must be moved or motivated to do so. What this motivation consists of and why these (and not other) children should possess it are not known. The characteristics accompanying reading avidness may be immutable, or they may be teachable. There may be several types or patterns of avid readers.

As Stott (1973, p.382) stated, ". . . the largest variable in cognitive function (for example, learning to read) is not . . . whether a problem is solved correctly, as whether it is attempted." This study is an endeavor to identify the motivational characteristics and traits associated with reading avidness of children who demonstrate clearly a strong desire to read. For it is in the obviously avid readers that one will find factors which are correlated with reading motivation.

The identification of traits which are associated with reading motivation may suggest remedial procedures to be implemented to develop motivation in children lacking this trait.

II. STATEMENT OF THE PROBLEM

Poor readers do not always do well in remedial assistance because of their lack of interest, or "poor motivation". If they were given or taught or allowed to develop traits associated with high reading motivation, their chances to benefit from remedial programs would be much improved. The problem seems to be a lack of information on what this "high motivation to read" entails.

Little is known about the prolific reader. Why do children engage in much reading behavior? What are the affective and cognitive attributes of voracious readers? Are factors of personality, creativity, intelligence, and achievement related to this motivation to read? Is there more than just one type of avid reader, and if so, what are the characteristic patterns of different avid readers?

In short, are there definable motivational attributes which characterize the avid readers, and can these characteristics be of any use for the disadvantaged reader?

III. RESEARCH QUESTIONS

What are the affective and cognitive attributes of voracious readers? What is the reading ability of avid readers in terms of achievement levels? What are the personality and creative characteristics of avid readers? Are avid readers intellectually superior to nonavid readers? What are the social traits of avid readers? Are such factors as interests, attitudes, behavioral patterns, and family background important in describing avid readers? If these traits are related to reading motivation, how do they combine in describing specific and general patterns of motivation to read? What distinguishes avid readers *per se*?

IV. DEFINITIONS

The terms "reading motivation" and "motivation to read" are used interchangeably in this study, and refer to a desire to undertake reading behavior of books, magazines, journals, and other printed materials.

Avid readers are described as those readers who exhibit much reading activity.

Abbreviations used in this study include the following: CPQ for the Children's Personality Questionnaire (Porter, Schaie, and Cattell, 1965), CTP for the California Test of Personality (Thorpe, Clarke and Tiegs, 1953), SMAT for the School Motivation Analysis Test (Sweney and Cattell, 1966), WISC for the Wechsler Intelligence Scale for Children (Wechsler, 1949), TAT for the Thematic Apperception Test (Murray, 1943), and SEI for Coopersmith's (1967), Self-Esteem Inventory.

V. OUTLINE OF THE STUDY

This study is basically explorative and descriptive in intent and design. Inferences are made concerning reading motivation which will be examined in depth through a series of assessment instruments. Finally, a theoretical structure will be proposed concerning the patterns of traits of avid readers.

The focus of this study is upon children of elementary school age who clearly exhibit behavior suggestive of reading avidness. The concern is not with competent, capable high-achieving readers, but with readers of any ability level who display a keenness to read. The competent reader may not necessarily possess any motivational traits to read.

Wanting to learn how to read, and wanting to keep on reading once one knows how to read may involve two different types of motivations. Therefore, this study will focus on children who have already learned to read, and not on the beginning reader.

In addition to a pilot study using six students, this study comprises an in-depth assessment of thirty avid readers. Teachers in grades two, four, and six in several local elementary schools were asked to submit names of students who they thought were avid readers (in the sense of engaging in much reading activities). Verification was sought from the school librarian. Eventually a total of 36 students (6 from the pilot study and 30 from the main study) were selected as being avid readers. These students underwent a thorough battery of test instruments including personality, attitude, creativity, intelligence, and behavioral assessment. Information was also sought from the peers, teachers, and parents of these avid readers, usually in the form of questionnaires. In this manner a wealth of data was gathered concerning possible correlates of reading avidness in these children.

Two types of patterns will be depicted -- those of the motivational characteristics within individuals, and those between groups of individuals based on sex, grade, and so forth.

VI. SIGNIFICANCE OF THE STUDY

There is currently little research available concerning the motivational characteristics of readers. Many assumptions are often made about what motivates children to read, with a resulting emphasis on reading preferences and activities, but a de-emphasis upon the inherent motivational and personal qualities of the individual. Often characteristics are attributed to avid readers that may not be universal, such as that of superior achievement. Remedial teachers are instructed in cognitive skills development, and affective or motivational development is frequently given secondary importance.

A delineation of reading motivation will have significance not only to those who are attempting to remediate poor readers, but also to those who are concerned with realizing a potential to become more interested readers in seemingly "turned off" (unmotivated) readers.

CHAPTER II

REVIEW OF RELATED LITERATURE

This study is concerned with identifying and describing the characteristics of avid readers. What is it that makes voracious readers read? Are there specific traits unique to avid readers that relate to a theory of motivation to read?

Specifically, the elaboration of the characteristics of avid readers has been hitherto undocumented as far as this writer is aware. There is much research on the traits of good (able) as compared with poor (disabled) readers, of gifted with retarded readers, of well-adjusted with maladjusted readers, of high-intelligent readers with low-intelligent readers; as well as other studies involving combinations of achievement, intellectual, social, and personality factors. These types of studies have particularly been useful in isolating the differences between the competent reader and the disabled reader, but not between the highly-motivated reader and the unmotivated reader.

This chapter first examines literature concerning human motivation and how this motivation may be applicable in elaborating the motivation to read. The relevancy of some theories of motivation in explaining reading motivation is also discussed. Secondly other studies that might indicate possible related factors of reading motivation are reviewed.

I. MOTIVATION

In this section three current theories of motivation are presented, and discussed with respect to their adequacy in explaining reading motivation.

Children who read great amounts of material have at least one thing in common -- they are obviously motivated to read. This motivation may be extrinsic, as in some source of pleasure removed from the student, eg., classroom reading charts and prizes for students reading the most books; or intrinsic, as in reading solely for pleasure, eg., comic books. This motivation may be mostly cognitive, as in studying from high-school text books; or mostly affective, as in skimming through pornographic "literature". It would appear that what is labelled the "motivation to read" can cross several domains.

Motivation, the "why" of behavior, connotes different meanings to different people (Haber, 1966), but at least two elements of a motivated behavior (as compared with a reflex or biologically-oriented behavior) are common to descriptions of motivation. There is an energy, an impulse, a drive, a force, a power, and other such terms, which is being mobilized; and there is a direction, goal, or destination for that energy. In terms of avid readers, the drive is the activity of reading, and in these readers this drive is high -- they are voluminous readers. The immediate goal is a book, magazine, pamphlet, chart, and a host of other printed materials.

People differ in the types and strengths of motivations, and this is shown largely in personality dispositions (Hilgard and Atkinson, 1967). Even in a restricted group where everyone seemingly has a strong desire and a common goal, the motives (i.e., whatever arouses the activity or energy) may differ (_Ibid_., p.118). Thus avid readers will differ on the aspect of motives -- the reasons for engaging in reading activities. The motives, too, are debatable. Does one read for pleasure, for peer recognition, or withdrawal, or knowledge, or many other possibilities? Sometimes conflicting motives result in a behavior that, taken by itself, does not accurately portray the student's motive (p. 141); and so for avid readers the motive to avoid contact with the parents, for example, may be stronger than the motive to acquire knowledge through reading. Yet in other cases the motive to gain peer recognition through a classroom reading chart may be stronger than reading solely for pleasure. In each of these cases the visible behavior is the same, but the underlying causes or motives differ vastly.

Hilgard and Atkinson (1967) continue by claiming that it is impossible then to infer a motive directly from behavior (p. 141). The simplest way to reveal a person's motives is to ask him why he is doing something, but he may not know why, and if he does he may not be inclined to answer honestly. Indeed, the question "Why do you like to read books?" was asked to the avid readers chosen for this research, and some truly personal motives were suggested.

There are at least three theories which are relevant to examining the motives of avid readers.

A. Behavior Theory

A basic premise of behavior theory is that a person will tend to reproduce a behavior if that behavior or its consequences are pleasurable to him. For example, a preschool child who gets great personal enjoyment and parental attention from reading a Dr. Seuss book will tend to read another Dr. Seuss book. That tendency will be heightened if the child gets chocolate bars and ice cream after every book he reads.

Havighurst (1964) points out that the motivation to learn is seldom viewed as a general motivation to learn, but usually is directed at a specific area of learning, and in terms of reading motivation one could argue that a person is directed toward a specific area of reading, either in terms of a pleasure-seeking versus information-acquiring dichotomy, or in terms of specific types of reading materials such as science fiction, animal stories, and sports stories to name a few.

Avid readers may be considered to have been systematically, and in some cases haphazardly, "reinforced" or rewarded with pleasurable stimuli because of their involvement with reading. Rogers (1966), for example, through a series of rewards was able to improve the reading scores of grades 4, 5, and 6 boys. Here he reinforced the boys' motives of trying to surpass their previous reading scores. But the important point he makes is that it is possible and desirable to reinforce the motivation (the urge to attempt) rather than merely the performance. Therefore, avid readers may not necessarily be good, competent readers; they may be poor-achieving readers because of lack of ability perhaps, but because their urge to engage in reading has been reinforced, they tend to reproduce that urge again.

Brophy (1972) realized the importance of motivation which is internally or self-initiated -- this type of motivation being preferred to motivation externally-oriented. In facilitating this internal motivation reinforcement is useful; but of equal importance is imitation (Brophy, 1972; Havighurst, 1964). People set examples for children, and children reproduce the parent's or teacher's behaviors. Models may give rewards thereby strengthening their power as models. A parent who reads a great deal will likely tend to have avid-reading children. If that parent also encourages, praises, and rewards his children for reading, then their tendency to read is increased.

Teachers could become very useful models for children in fostering a motivation to learn according to Brophy (1972), and he offered some suggestions to this end. Furthermore, MacMillan (1972) focused on the teacher's ability to deal with the affective deficiencies in motivation of mentally retarded children. Other researchers such as Lipe and Jung (1971) dealt with the environmental contingencies rather than the personal inadequacies in facilitating motivation to learn. They saw a weakness in learning as being in the system, not in the person; and so they would restructure the environment to encourage learning. Mentally retarded children, for example, have become too dependent on environmental cues rather than on their ability and thus their motivation to learn is diminished (MacMillan, 1971). Lipe and Jung (1971) saw the following as different reinforcing strategies: material incentives (food, crayons), social incentives (praise, pressure), knowledge of results, secondary reinforcement (money, marks), modelling, and aversive incentives (disapproval, spanking). The voracious reader may have been conditioned through any combination of the above techniques.

Once behavior theory techniques are mastered, they can be used extremely effectively in arousing a student's behavior toward reading. Harris (1970) and Noland and Craft (1976) suggested various strategies in encouraging children to read, but foremost among these strategies is that of the caring, love, and understanding that parents and teachers display toward the child. The amount of affection shown to the child would therefore seem to be a vital element in reading avidness.

B. Cognitive Theory

The cognitive theory is concerned with information processing and decision-making. An individual is motivated according to his cognitions (thoughts) (Hilgard and

Atkinson, 1967). He becomes involved in a task; he estimates his own level of achievement, sets his goals, reassesses his strategies (Ibid., p. 151), much like a programmed system. This theory is mentioned only briefly here as it relates very closely to the next type of motivation.

C. Unconscious Motives Theory

This theory has its roots in behavioral philosophy, and was expounded by McClelland, Atkinson, Clark, and Lowell (1953). Since the publication of their book The Achievement Motive, many writers have added substance to their initial research. McClelland et al stated that all motives are learned (Ibid., p. 275), developing from repeated affective experiences connected with certain situations (much in the same way that one seeks wealth because of the properties associated with financial success). The child has a learned motive to strive to perform certain tasks well by himself according to some standard of excellence, i.e., the achievement motive (n Ach).

The assumption made is that if there is a strong tendency or motivational disposition toward achievement, then it will be revealed in fantasy without the student being aware that he is telling things about himself (Hilgard and Atkinson, 1967); hence, the unconscious motives are subtly revealed. McClelland (1962) proposed that motivation is best measured in fantasy because it is partially independent of perception and learning; and it is a sound, acceptable, and useful technique.

The technique most often used to uncover these unconscious motives is through story-telling using the Thematic Apperception Test or TAT (Murray, 1943).

This technique has been used by Argyle and Robinson (1966), Crandall, Katkovsky, and Preston (1962), C. P. Smith (1969b), and Stiles (1965). Other writers have employed more objective-projective tests of motivation to succeed, such as children chosing paired pictures of imaginary characters (Adkins and Ballif, 1972), or a questionnaire format (Hermans, 1970).

Cofer (1972) was critical of the projective method of revealing achievement motivation. He claimed that the types of pictures used may elicit more or fewer achievement themes from people depending on the amount of achievement cues in the pictures. He further stated that the need for achievement scores change in many people for no apparent reason. Finally, the fantasy-based measures do not relate very well to questionnaire procedures. This would seem to suggest that the TAT and related projective techniques do not have consistent reliability (Smith, 1969b) and validity for assessing needs and motives to learn.

After considerable exploration, it was decided to abandon the formidable route set by McClelland et al (1953) in ascertaining the achievement motive. The use of the projective technique was doubtful in light of Cofer's (1972) comments, and the use of the TAT or other cards would have given only a very small amount of speculation at a great time expense.

It was also decided to depart from the viewpoint of seeing reading avidness as a need for achievement. Referring to McClelland's et al (1953) comment that the achievement motive is a need to perform a certain task well, (viz., a standard of excellence), by himself, then avid readers would probably express this need to become accomplished readers in story-telling situations. Granted that if this need were indeed expressed, it would give little information other than saying that this particular student shows a high need for achievement which is manifested in reading avidness. Furthermore, it is not all too clear what are the "standards of excellence" or "performance tasks" set by the avid readers. In many cases once certain levels of competence are achieved, there is little interest in improving these skills beyond that functional level (Moss, 1969). This would seem to be true with avid readers. In a competitive classroom this would be evident -- a child competes with others, or with his own past performance, in reading more material than anyone else. But the need for achievement theory would do little to establish differences and patterns among avid readers, which is the purpose of this study.

There have, however, been several very useful techniques used by the "unconscious motives" theorists that are relevant to this study.

Achievement motivation is sometimes viewed as distinct from performance, and formulas are concocted to show this motivation using the strength of a motive, the expectancy of success, incentives, and performance. In other words, a high motivation to learn or to read does not necessarily mean that the person will have a good performance in learning or in reading. It is conceivable that in a classroom there would be children who are highly motivated to read, but do not display this motivation because of other factors, such as inability, other higher motivations, and situations variables (for example, if there were no books in the home, or no time to read).

Schell, Veroff, and Schell (1967) predicted that there should be a positive relationship between achievement motivation and performance. Past performance certainly is important to a child in setting his expectancies, and it would be useful therefore to consider the performance of avid readers in reading achievement. Although Schell et al (1967) found that a very high classroom reading group showed much more achievement motivation than a very low classroom reading group, it remains to be seen if levels of performance distinguish between high and low reading motivation groups.

Some children seem to be more motivated by pleasure in success, and others by fear of failure (Hilgard and Atkinson, 1967). This fear is often expressed in anxiety, particularly anxiety toward being evaluated in test situations. It must be kept in mind that when good achievement is the motive, failure to do so results in many negative effects; but when reading a great deal is the goal, failure to reach this does not result in any significant negative effects.

The Test Anxiety Scale for Children (Sarason, Davidson, Lighthall, Waite, and Ruebush, 1960) has been used by Crandall et al (1962) and C. P. Smith (1969b), and in this study consideration will also be given to assessing the test anxiety of avid readers through Sarason's et al (1960) anxiety scale.

Stiles (1965) stated that little is known of what motivates the grade one child to learn to read, and perhaps fear of disapproval from parents and teachers is one answer. But in avid readers does that fear lessen or grow? Stiles added that the attitude of beginning readers also plays an important role in their learning to read, and so the impressions and attitudes of avid readers toward reading would seem to be a worthwhile evaluation.

Parental attitudes were important in fostering achievement motivation in children according to Argyle and Robinson (1962) and C. P. Smith (1969b). C. P. Smith (1969b) considered that the parent's own self-concept was crucial in establishing achievement motivation in their children.

Thus far the literature on achievement motivation seems to point out several areas that might be explored in describing avid readers: anxiety, reading interest and attitudes, teacher and parent attitudes, and self-concept. These areas will be examined further in the next section.

II. OTHER STUDIES CONCERNING POSSIBLE TRAITS OF AVID READERS

As mentioned in the previous chapter, the characteristics of avid readers cannot be gleaned from literature about competent readers or well-adjusted readers. Neither of these descriptions can be totally typical of avid readers. Avid readers may not necessarily be competent readers and competent readers may not necessarily possess a keen desire (motivation) to read. Nevertheless, it is necessary to review what testing instruments have been used in assessing readers, in order that some justification can be given to a wise selection of tests to assess avid readers.

As previously stated, research seems to emphasize two features of the development of reading -- achievement and personality. Both of these areas have extremes of desirable and undesirable traits. What is often found is a high correlation between reading achievement and personality adjustment (Norman and Daley, 1959; Vatcher, 1970; and Zimmerman and Allebrand, 1965; to name a few among many studies). Usually some index of reading achievement such as standardized reading test scores is compared to some personality variable obtained on a standardized personality test.

A. Achievement

It is common to find some indication of achievement levels of subjects used in reading research, and this assessment of achievement level includes many varieties of achievement tests. The achievement levels of competent and of well-adjusted readers has been well documented, but the achievement levels of avid readers (not only in reading, but in other academic subjects) remains uncertain. Therefore, the inclusion of some means of ascertaining the achievement levels of avid readers would seem to be of prime importance in this study.

B. Intelligence

To merely review the mountain of information on reading ability and intellectual factors would be prohibitive.

The intellectual capabilities of avid readers would offer much insight into possible correlational factors. It is unclear, for example, whether avid readers are intellectually gifted and thus have a propensity toward seeking cognitive stimulation, or whether they lack such intellectual skill and thus seek more leisure activities. Also, the effects that much reading activity would have on the specific intellectual functions commonly assessed by intelligence tests remains debatable.

The Wechsler Intelligence Scale for Children (WISC) (Wechsler, 1949) is more commonly used than other intelligence tests for individual assessments. The reliability coefficients, computed by the corrected split-half technique, are reported in the WISC manual as follows: for Verbal Scores -- .88 for age 7½, .96 for age 10½, and .96 for age 13½; for Performance Scores -- .86 for age 7½, .89 for age 10½, and .90 for age 13½; and for Full Scale Scores -- .92 for age 7½, .95 for age 10½, and .94 for age 13½. No validity figures are quoted in the manual, but correlations of .80 and better with the Stanford-Binet are reported by O. Buros in The Mental Measurements Yearbook.

Recently Bell, Lewis, and Anderson (1972); Levine and Fuller (1972); and Rugel (1974) have used the WISC in assessing the intellectual correlates of reading deficits. Poor readers usually do better than normal readers on spatial tasks, i.e., manipulative tasks involving placement of objects in proper spatial relationships. Searls (1975) sums much of the research pertaining to the WISC. The assessment of the intellectual potential of avid readers would seem to be imperative for this study, and the WISC offers sufficient reliability, validity, and precedent to be considered as a sound testing instrument for the present research.

C. Creativity

The role that creativity would have in acting as a possible cause of reading motivation might be a meager one. Conversely, the creative talents of children might change as a result of much reading.

One effect that much reading activity might have on children is to cultivate their creative thinking. The creativity tests by Torrance (1966) are widely used in the assessment of creativity, and seem to be expedient in administration.

Reliability of the scoring procedures of the Torrance Tests of Creativity is discussed elsewhere in this research. A number of test-retest reliability studies mentioned by Torrance have yielded reasonably high reliability coefficients: from .79 to .93 for Verbal Fluency, .61 to .84 for Verbal Flexibility, .73 to .88 for Verbal Originality, .50 to .80 for Figural Fluency, .63 to .73 for Figural Flexibility, .60 to .85 for Figural Originality, and .71 to .83 for Figural Elaboration. These coefficients were obtained using children in grades four to six, and thus may vary for older or younger students.

Torrance refers to many other studies in presenting a case for the validity of his test in assessing creativity. Although Buros reports that the predictive validity is questionable, construct and concurrent validity are sufficient to suggest that the test does measure behaviors consistent with the literature on creative behavior.

Creativity can be approached in many ways, and the Torrance Tests of Creativity may be assumed to fairly consistently measure one type of creative ability in avid readers, based upon the reliability and validity evidence offered by Torrance and others.

D. Motivational Preferences

As mentioned earlier, current theories of motivation emphasize achievement motivation, but this emphasis is not necessarily practical in examining reading motivation. Objective measures such as those used by Cole (1974), can indicate to what extent children would prefer certain activities over other activities.

If children are given a choice of activities to follow, their choices reflect their interests, values, and motivations. Children who regularly choose to read over other activities exhibit a strong value toward and motivation in reading. V. Crandall (1969) attempted to discover the tendency among children to choose academic-related activities over social and sensual goals. Although she offered no evidence to support the reliability and validity of her instrument, on a surface examination, i.e., face validity, it would appear that children's motivations toward academic achievement might readily be revealed by her questionnaire. It remains to be seen the extent to which avid readers might choose academic activities, and to what degree an academic motivation influences a motivation to read.

Bell *et al* (1972) used the *School Motivation Analysis Test* (*SMAT*) developed by Sweney and Cattell (1966) in attempting to discover some motivational factors of retarded readers. Children were asked to choose whether or not they would like to engage in a particular activity.

Their preferences would once again illustrate their motivations toward school activities, growth, sex, humor, aggression, and so forth. Although they focused on slow readers, the SMAT may be a very useful objective instrument for ascertaining the different motivations of avid readers. The SMAT is based on R. B. Cattell's factor analysis approach, and although Sweney and Cattell present impressive data concerning the "loading" of factors of motivation, they do not formally present any discernible evidence of reliability and validity.

In spite of the lack of such evidence, it was decided for four reasons to use the SMAT to attempt to isolate types of motivations that may be occurring in avid readers -- first, because there were no other published objective motivation tests known to this writer; second, the SMAT logically and reasonably could be considered as a typical testing instrument (its construction was not unlike many other tests); third, because of the eminence of R. B. Cattell it was assumed that research conducted by him would be of a reputable (if not debatable) nature; and fourth, none of the testing instruments alone was used as a sole criterion for describing avid readers, and thus the SMAT was used in conjunction with other test results to derive typologies of avid readers.

E. Personality and Attitudes

In attempting to seek possible correlates of reading motivation, the area of personality would seem to offer some relevant information. For example, are avid readers well- or poorly-adjusted? Do they tend to be outgoing (extroverted) or withdrawn (introverted)?

When one thinks of avid readers, certain personality stereotypes may come to mind, and these stereotypes may or may not be indicative of most avid readers.

The areas of self-concept, anxiety, general personality adjustment, and attitudes toward reading would seem to be relevant in describing avid readers. How do avid readers feel about themselves? Are they usually tense or relaxed about school? Are there any common personality patterns descriptive of avid readers? How positive are their attitudes toward reading? In these areas the literature offers a variety of assessment techniques.

Self-concept. Black (1974) using the _Piers-Harris Children's Self-Concept Scale_ (_The Way I Feel About Myself_) (Piers and Harris, 1969) found significant personality differences between normal readers and retarded readers in 50 elementary children referred to a school clinic. Matthews (1974), also using the Piers and Harris (1969) scale, discovered that girls who were good readers tended to have positive self-concepts. Furthermore, in terms of oral reading ability, she stated that "children with good oral reading self-perceptions perform better in oral reading accuracy than children with poor reading self-perceptions (p. 111)." In her study she delineated the person's self-concept as an oral reader, which could be expanded to the person's self-concept as an avid reader for this study.

The Piers and Harris (1969) self-concept scale contains 80 items requiring "yes-no" responses to statements describing children. It can be used at the grade three level in group administration, or at younger grades on an individual basis. Reliability and validity as reported by Piers and Harris were sufficiently high to warrant consideration of this instrument for use in this research. In terms of reliability the split-half method yielded coefficients from .78 to .93, while the test-retest method (two- and four-month intervals) indicated a coefficient of .77. To ascertain the validity Piers and Harris compared their questionnaire to other self-concept questionnaires resulting in correlation coefficients ranging from .48 to .68. They also attempted to show validity by the amount of concurrence between the students' self-reports and the ratings of peers and teachers, but these coefficients were less impressive, averaging in the .40's.

Using 22 trait-descriptive adjectives at the fourth, fifth, and sixth grade levels, Lipsitt (1958) demonstrated effective use of his scale in identifying students whose "reported" self-esteem differed significantly from their "ideal" self-esteem. Test-retest reliability coefficients over two weeks ranged from .73 to .91. Piers and Harris (1969, p. 6) reported a Pearson product-moment correlation of .68 between their scale and Lipsitt's (1958) scale, which would seem to indicate that these two instruments measure fairly consistently, and because they differed in construction and in the nature of assessing self-concepts, they would complement each other in an assessment of the self-concepts of avid readers. Lipsitt does not report any evidence for validity.

A self-concept questionnaire of 50 items used by Perkins (1958) suggested that teachers and peers are fairly accurate in identifying students' self-concepts. He reported a reliability coefficient of .65, although he does not specify how it was obtained; and a comparison of the results of his self-concept questionnaire with those of an external measure of self-concept (again unspecified) produced a mean percentage of agreement of 70 per cent, indicating that his Q-sort was a valid instrument for studying the self-concepts of children in groups.

Although the two self-concept questionnaires just cited were not used specifically for reading groups (other than for elementary grades), they would seem to serve a useful purpose in appraising the self-concepts of avid readers.

The Self-Esteem Inventory (SEI) by Coopersmith (1967) was a part of his monumental research on the antecedents of a child's self-concept. His scale was suitable for children aged 8 to 10 years (test-retest reliability for a five-week interval was .88, and for a three-year interval was .70 -- validity was also firmly, but not statistically, postulated). Although Coopersmith stated that there was only a weak relationship between self-concept and academic performance, Simon and Simon (1975) used Coopersmith's SEI to find significant positive correlations between self-concept and intelligence, and self-concept and reading achievement in children aged 10 to 12 years.

From the general self-concept scales mentioned above, several items from each were considered for use in this study, and will be discussed in the next chapter. There is a recognized danger in combining several established self-concept questionnaires into one global instrument. For example, the reliability and validity of the one total questionnaire may not reflect the reliabilities and validities of the separate questionnaires. Nevertheless, this combining procedure was undertaken for several reasons -- to provide a comprehensive assessment of the readers' self-concepts and attitudes that each individual self-concept questionnaire *per se* did not give -- to give a broad spectrum of the readers' self-concepts and attitudes toward family, school, friends, self-worth, abilities, and so forth -- to partially compensate for a weakness of self-report inventories of not accurately reflecting the child's true self-concept (some children may deliberately or unintentionally respond favorably rather than realistically) by presenting a great number of items wherein the child's possible tendency to misrepresent his feelings may be more readily discovered -- and to provide a source of information which could be used in delineating the characteristics of avid readers. In other words, the intent of such a lengthy self-concept questionnaire was not to test for significant differences in self-concepts as it was to gather pertinent information concerning the self-concepts of avid readers.

In essence, the inclusion of a self-concept assessment would be to reveal the feelings that avid readers have about themselves, their friends, families, school, physical attributes, anxieties, and so forth.

Anxiety. One would expect that avid readers would be relaxed and easy-going, since they do partake in many leisure activities. But it could be possible that avid readers are tense, and seek to find relaxation in reading. Anxiety might indicate some further traits of reading motivation.

Quandt (1972) pointed out that the self-report nature of most self-concept tests raises doubts about their validity. He felt that some children are not very realistic or insightful, and others may be just simply dishonest in their responses. Two means of counterbalancing these deficiencies are through indications of the child's "defensiveness" or tendency to respond favorably, and through behavioral observations. Subsequently, C. P. Smith (1969b) employed a measure of defensiveness in his study of achievement-related motives, but many researchers use the Test Anxiety Scale for Children (TASC) (Sarason et al, 1960) as an index of the tendency to avoid failure. This test would seem to be appropriate in ascertaining the tendency of avid readers to become defensive toward being evaluated, and the extent of their anxieties about school. The authors describe a considerable amount of impressive evidence to support the validity of the TASC, and Feld and Lewis (1969) have also added support to the validity of the TASC in their modifications of it.

Similarly, the Children's Form of the Manifest Anxiety Scale (CMAS) (Castaneda, McCandless, and Palermo, 1956) would offer an indication of the general anxiety of avid readers. The test-retest reliability coefficients of the CMAS were reported as .90 for a one-week interval, and for a one-month interval as .59 to .91. Based upon observable anxiety manifestations and other anxiety scales, the CMAS was also claimed to have good construct validity.

It would be expected that avid readers will have high positive self-concepts and low anxiety. These expectations are generated from the suspicion (since verification is not yet known to this writer) that avid readers may incline toward the leisure and recreational purpose of reading rather than the achievement gains reading may offer. Thus avid readers may likely be relaxed and not anxious, but this remains to be seen.

The second means of validating the child's self-concept report is through the observations of parents and teachers. Children with positive self-concepts shoud behave in positive manners. These observation scales are discussed later in this chapter.

Personality. Avid readers may be comprised of several personality types, each type displaying unique traits and characteristics. These different personality groupings may also suggest causal factors of reading motivation, as in the case of an avid reader who might be extremely shy and withdrawn. Thus, personality would appear to be an area relevant to the study of reading motivation.

In terms of general personality adjustment, two tests are mentioned frequently in the literature. The Children's Personality Questionnaire (CPQ) (Porter, Schaie, and Cattell, 1965) was used by Frost (1965) to assess 40 slow readers aged 8 to 11 years. He found these "backward" readers to be generally withdrawn, introverted, and lethargic. Hebert (1971) used the CPQ and a reading achievement test to ascertain the personality and achievement factors among 22 disabled male readers aged 9 to 13 years. He described the low-achieving disabled readers as having no anxiety and no motivation, but the high-achieving disabled readers were more anxious.

Subjects of junior high age labelled as retarded readers scored significantly higher on the "O" Factor (i.e., a rough measure of self-esteem) than did a random sample of good readers from the same school, as reported by Lawrence (1975). It could be as Coopersmith (1967) has suggested that these children maintain a favorable self-regard in the face of poor academic performance. "Happy as a pig in mud" seems to be descriptive of these children.

Porter et al (1965) reported three types of reliability coefficients of the CPQ: the split-half method give correlations of .30 to .64; the parallel forms method yielded correlations of .32 to .67; while the test-retest method of a two-week interval produced correlations ranging from .52 to .83, with the mean around .70. The validity was discussed largely in terms of the factorial analysis of the items, and one form of validity, computed from the coefficients of equivalence, ranged from .56 to .82.

The second often-used standardized personality test is the California Test of Personality (CTP) (Thorpe, Clark and Tiegs, 1953). The reliability coefficient of the CTP, using the split-half method, was reported as ranging from .918 to .933, while the face validity (not presented as a statistic), was demonstrated on the basis of the care taken to construct the test.

Norman and Daley (1959) used the CTP to compare superior with inferior grade six male readers. Among other traits, the latter group was characterized by unstable home environments, frustration, rejection, and aggression. In finding similar results, Matlin and Mendelsohn (1965) added that the well-adjusted and poorly-adjusted students may perform equally as well, but the teachers may give better grades to the better adjusted students. Thus they claim that the child's personality adjustment may not be affecting achievement per se, but rather the teacher's perceptions of the child's achievement; well-adjusted children leave good impressions on their teachers.

Good and poor fourth- and fifth-grade readers were compared using the CTP in a study by Zimmerman and Allebrand (1965). The good readers presented themselves as more adjusted than the poor readers in every subtest of the CTP. The good readers saw themselves as having feelings of belonging, good school relations, and being independent. The authors concluded that the good reader is more prone to be more adjusted and motivated by intrinsic rewards leading to a persistent striving for success than is the poor reader.

Holzinger (1967) in using the CTP in grades one and four concluded that personality and behavior are very closely associated with reading achievement to the extent that a decrease in reading achievement goes hand in hand with a decrease in positive personality traits and desirable behaviors. The causal relationship was in doubt, but sufficient evidence has been gained from this and other studies to demonstrate that improving one's self-esteem leads to an improvement in achievement, and consequently reading personnel are often cautioned not to ignore but rather to foster the development of children's self-concepts (see Bell, 1945; Bixler, 1945; Quandt, 1972; and Thayer, 1970; for example).

More recently, Aaron and Muench (1974) used the CTP to single out behaviorally maladjusted teenage boys. Then, through guided group discussion centering on stories, an attempt was made to foster the emotional and intellectual understanding of other's feelings. This was partially accomplished, and a change in some attitudes did result. Similarly, Greer (1972) encouraged the affective growth through reading:

> Just as congitive growth may be fostered by a comprehensive program of experiences designed to elevate thinking to higher levels, so may affective potential be developed by a program rich in a variety of affective experiences so structured as to elicit greater and greater depth of feeling and to produce an expanding repertoire of emotions. p. 341

It could well be that avid readers strengthen their personality adjustment by virtue of the many emotions they may experience in their reading activities.

As self-concept, anxiety, and personality tests of many sorts have been used in previous studies in describing readers, it is reasonable to assume that these same instruments may be used to describe avid readers. It must always be kept in mind that avid readers may not necessarily be good readers, and thus any comparison between avid readers and poor readers is completely unfounded.

In selecting the self-concept, anxiety, and personality tests to be used for this research the more popular tests previously mentioned were used. Their credibility as tools in research has mostly been established and wherever possible indications of reliability and validity were stated. Those test instruments that did not include such substantive information were used cautiously, and always with the purpose of collecting as much relevant information as possible concerning avid readers, and not with the intention of "testing" in the experimental sense. Many tests are standardized and offer ease in administration and scoring. A combination of the several self-concept tests was utilized, and this is discussed further in the next chapter.

It was felt that since self-concept seemed to be such a vital pervading force in reading behavior, that an assessment of the self-concepts of avid readers was particularly important. Great care was therefore taken to elaborate upon the self-concept tests already in use. An examination of the _CTP_ and _CPQ_ showed that different kinds of information was available from each test, and so both were chosen to be included in this research. For the same reason both of the anxiety questionnaires already mentioned were also chosen for use. In short, the tests described to this point are not obscure irrelevant instruments. They would seem to offer valuable information in describing avid readers.

Attitudes. The affective domain includes one's attitudes and interests, and the research on reading attitudes and interests is vast. This study would be incomplete without some attempt to describe the interests and attitudes of avid readers.

Two fairly recent attitude questionnaires were examined. Brookover, Paterson, and Thomas (1962) and McClendon (1966) used attitude questionnaires in describing young readers, and parts of both of their respective surveys were chosen for use in this study. These questionnaires were completed by directly questioning each avid reader. Documentation of the reliability and validity of these two surveys was not undertaken by this writer, since no numerical data from these surveys was subjected to any form of statistical analysis in this research. These attitude questionnaires were useful for gathering information concerning the readers' interests, pastimes, and attitudes toward reading, plus other subjective insights into the role that reading played in their daily routines.

Rowell (1972), instead of directly questioning readers, had teachers complete a 16-item questionnaire to portray the attitudes of their students toward structured reading activities, leisure reading, and reading in the content areas. Her scale was based upon the teacher's observations of the children's behavior, and reading attitude was thus inferred from the behavior. To establish reliability, she had four observers also rate 40 students using her scale. The interrater reliability coefficients, based on the product-moment correlations formula, ranged from .76 to .95, and averaged .88. Using a similar system of comparing observer and teacher ratings of 115 students, she established coefficients of correlation from .52 to .84 (with a mean of .70) to support her claims for acceptable validity.

F. Behavior

Frequently one's attitudes are exhibited in behavior patterns, and in the case of avid readers, behavioral observations may be elicited from those who are most exposed to the avid readers. Teachers, parents, and peers may contribute significant information toward the understanding of what moves the child to read.

Teacher Observations and Evaluations. In a fairly thorough search of the literature, Steig (1972) postulated that one very important determinant of a student's self-concept was the way in which the teacher viewed the student. Quandt (1972), in citing other research, concluded that self-concepts (and expected behavior) are based more on views that people important to the child, i.e., teachers and parents, appear to have about him than upon the child's previous success or failure with the task. The role of the teacher in developing a love for reading cannot be overlooked.

Results of such teacher questionnaires as that constructed by Andrew, Hartwell, Hutt, and Walton (1953) for describing pupil's adjustment are useful in understanding the way that others feel about avid readers compared to the way avid readers feel about themselves. Natchez (1959) and Holzinger (1967) used teacher's comments and observations in deriving a clearer picture of the personality patterns of below-average readers.

In an in-depth study on achievement motivation, C. P. Smith (1969b) used a 31-item teacher questionnaire designed to assess the children's behaviors of dependence-independence, achievement motivation, and other forms of classroom behavior. He compared these results to those of a similar questionnaire given to the parents of his subjects. Although he found no significant results between achievement motivation and teacher ratings of dependence-independence, his rating scale seemed to be a sound behavioral assessment.

Renzulli, Hartman, and Callahan (1971) reported on a scale developed by Renzulli and Hartman (1971) for the purposes of identifying superior (gifted, talented) students. This scale is very applicable for use in the present research, as avid readers seem to be "superior" in more than in just reading avidness.

Their scales were designed to reflect teacher estimates of student's characteristics in the areas of learning, motivation, creativity, and leadership. Avid readers would seemingly be strong in some of these areas, and so Renzulli and Hartman's (1971) scale was also given to the teachers of the avid readers to complete. There were thus three main sources used in deriving questionnaires for the teachers: Andrew et al, 1953; C. P. Smith, 1969b; and Renzulli and Hartman, 1971.

It should be noted here that the techniques used to determine the teachers', parents', and peers' impressions of the subjects' behaviors and attitudes were not amenable to statistical evaluation. In most sources of these behavioral questionnaires, reliability and validity substantiation were not detailed, and can only be assumed to be acceptable. At best claims are made that reflect the conscious and deliberate attempt to render the items valid. Upon perusing the nature of the items in these questionnaires, it may become evident that they would seem to assess accurately the opinions of others concerning avid readers if the questions were answered honestly. No claims are made here about the reliability and validity qualities of the instruments used in this section. In spite of this shortcoming of the lack of such evidence, these questionnaires were considered to be useful tools in supplementing information about avid readers. The information gained by these questionnaires was not used solely by itself in describing avid readers, but rather, this information was regarded in conjunction with other data collected by authentically reliable and validated instruments.

Parent Observations and Evaluations. The role of the parents in the development of their children's personality traits and academic achievement is undeniable. On the one hand family disorganization frequently leads to reading, behavior, and emotional problems at school (Wittick, 1964), and on the other hand family stability would tend to lead toward behavioral and emotional adjustment.

Coopersmith (1967) concluded that the parents of children with a high self-concept are concerned and attentive toward their children, and that they allow a considerable freedom within the established guidelines. Limits are usually well-defined for children having a positive self-esteem. Coopersmith also concluded that children with a high self-regard tend to be independent, creative, socially likeable, and exhibit leadership qualities. He utilized a questionnaire for mothers which reflected their attitudes on childrearing practices. As his findings relate to the qualities of high self-esteem and not necessarily to good or avid readers, they cannot be extrapolated to the results of this research.

A parental questionnaire was used by C. P. Smith (1969b) to compare parental attitudes with their children's anxiety levels, need for achievement, intelligence, and school achievement; but his conclusions are centered around the motivation to achieve success. Sarason et al (1960) also used a similar questionnaire in trying to discover parental attitudes as related to the development of children's anxieties.

Parents influence their children considerably. They may act as models, providing reinforcement and encouragement. They sometimes provide the external pressures that motivate their children to read. Are the parents of avid readers strict or lax? Are they also avid readers themselves? Are they involved with their children or removed from them? How much do they encourage their children? To what extent do they have and enforce limits? What are their attitudes and philosophies on child-rearing? The answers to these questions and others concerning parental attitudes were sought using the parental questionnaires mentioned above.

Inter-personal relationships. The inter-personal relationships of children often add another perspective to their personality adjustment. Natchez (1959), Holzinger (1967), and Glick (1972) employed sociometric techniques in evaluating the social-emotional factors of poor readers. Avid readers may relate unusually well or poorly to their classmates, and some indication of inter-personal relationships may be advantageous. It may be found, for example, that some avid readers are socially popular, while others are socially unpopular; and their social acceptability may be an influencing factor of their reading motivation.

G. Conclusion

In summary and conclusion, there has been no specific research published to this writer's awareness concerning the attributes of avid readers. Many studies tend to be related to the traits of reading motivation, particularly those studies with trends toward assessing competent readers or of a need for achievement. The variety of tests used in related studies lends well to the nature of this study. The specific content and selection of these instruments is presented in the next chapter.

CHAPTER III

DESIGN AND PROCEDURE

Thirty-six children in grades two, four, and six were used in this study. Six students from southwest Edmonton (one from grade two, one from grade three, two from grade four, and two from grade six) were initially used in a pilot study in the spring of 1974. Thirty other students constituted the bulk of the research. These students were chosen from Leduc, a community of about 9000 people 25 miles south of Edmonton. The pilot study was necessary in order to establish the usefulness and reliability of certain testing instruments, and to create a testing pattern.

These children who were used in the pilot study were seen individually at either the University of Alberta facilities or at their respective schools. They were given a series of tests which took about five hours per student to administer. Additional information about these students was gathered from their classmates (in the form of a sociogram), their teachers, and their parents.

Most of the students' parents were interviewed individually, while the teachers were requested to fill out three questionnaires about the students.

I. PILOT STUDY

The pilot study was designed to assess the utility and practicality of the testing instruments. The principals of three elementary schools in the southwest section of Edmonton were contacted. Mr. Powers at Belgravia, Mr. Ramsay at Richard Secord, and Mr. Dublanko at McKernan kindly offered their schools to be used in the pilot project.

A. Pilot Study Sample

It was explained to the teachers at the above schools that the researchers were interested in students who appeared to read a great deal. It was stressed that the reading material was not of great importance, and that the students' reading abilities and achievements were inconsequential. It was also mentioned that these students should have shown some regularity in their enthusiasm for reading books, i.e., that their interest in reading books was not merely an ephemeral fad.

Initially only students in grades two, four, and six were sought. It was thought that not every grade level need be assessed, and that if there were great differences between any of these grades, it might suggest developmental and maturational changes in the children of those ages.

Several teachers of the above schools offered names of students who they thought were avid readers. The researcher then checked with these cooperating teachers to see if indeed these were the types of students who exhibited much reading interest and activity.

Between two and six names were usually submitted by the teachers. If the teacher indicated that a particular student was a more avid reader than the other students, then that student was selected. If the teacher indicated several names of children with equal eagerness in reading, then only one name was randomly chosen. Then the student who was chosen was asked if she or he read many books at home. No further questions were asked at this time. If the response was negative, then another student from the teacher's submitted list was randomly chosen.

Eventually six students were identified as avid readers -- two from grade two, two from grade four, and two from grade six. None of the students was from the same classroom.

B. Procedure

A letter was sent to the parents of these children, briefly explaining the nature and purpose of the study and seeking written consent for the researcher to use their children in the study. Written consent was also sought at this time for the Wechsler Intelligence Scale for Children (Wechsler, 1949) to be given to these students.

None of the parents who were originally requested to participate refused. However, the parents of a grade two student claimed that her older sister in grade three was a much more avid reader. The sister's teacher verified this and so the girl in grade three was used. This did not hinder the study in any way, as the tests used at the grade three level were essentially the same as those used at the grade two and four levels.

The description of the testing instruments used in the pilot study is contained later in this chapter. There were some changes made between some of the tests used in the pilot study and those used in the main study.

C. Changes Made Between Pilot Study and Main Study

The only significant change made to the pilot study was to the testing instruments. Some tests used in the pilot study were incorporated without any changes into the main study. However, several tests were modified before being used in the main study. The experience of using the tests in the pilot study showed that some modifications were necessary.

The modifications were usually of two types -- altering a word or phrase to make it easier for the younger subjects of this study to comprehend a concept, and removing terms of negation (such as never, not, no) in order to reduce confusion in responding to a statement. These changes are elaborated further in this chapter in a section discussing the tests used in this study.

II. MAIN STUDY

About one-half year lapsed between the pilot study and the main study. Whereas the pilot study used 6 students from Edmonton, the main study used 30 students from

Leduc. Testing of the subjects occurred from November, 1974 to August, 1975.

A. Sample

All teachers of grades two, four, and six in all four elementary schools in Leduc were asked if they would participate in a research project from the University of Alberta. No teachers declined. There were a total of 23 teachers instructing these grade levels -- there were 8 grade two classes, 7 grade four classes, and 8 grade six classes. Of these 23 classrooms, 22 had students selected from them to participate in this study. One grade six teacher felt that no one in the classroom was an avid reader, and so this class was not used in the study.

As in the pilot study, the teachers involved in the main study were asked to submit names of students that they thought were avid readers. The librarians of three of the schools were also asked to submit students' names (the fourth elementary school had no library as yet). It was stressed that these students need not be good readers, but only fairly consistent avid readers, ie., engaged in reading activities more so than did other students.

A total of 37 names were submitted for grade two, 38 names for grade four, and 34 names for grade six. Out of this total of 109 submitted names, 27 were mutual choices of the teacher and the school librarian.

Thirty students were then selected from the teachers' lists. Ten students were chosen from grade two, ten from grade four, and ten from grade six. The method upon which they were chosen was based primarily on the extent to which the teacher felt that the student engaged in reading activities. Thus, if a teacher indicated one student as being a more avid reader than the others, then that student was selected; but if the teacher rated several students as about equal avidness in reading, then one name was randomly chosen.

Not all students who were initially asked to participate were used. One grade two student was replaced upon the mother's request. Recent family changes might have made the student too anxious. One grade six student was also replaced before testing commenced, as the student would have been away on holidays at the time of testing.

B. Procedure

Each family was first contacted by mail, and was asked to return a form giving the researcher permission to use their son or daughter in the study. Then the families were contacted by telephone and an initial testing session date and time were established. The students were met at their respective homes and then driven to one elementary school in Leduc. They were returned back to their homes in like fashion after testing. In some cases rural parents drove their children to the school.

Each child was seen for a minimum of three sessions, and a maximum of five. They were seen at least once individually (the initial session). Occasionally three students (but never more) were tested together, but only when they were doing the same tests conducive to group assessment.

The room used was a counselling room, always free from external distractions and quite amenable to students' concentration. Testing sessions lasted anywhere from 45 minutes to 100 minutes.

The total testing time per each child was about 4½ to 5 hours, although some students took longer. Usually three sessions were required. Most of the children were given the tests in a set order, but because the length of each testing session varied, the tests that each child did at one setting also varied. It was felt that the number of tests that were given at each session was not as important as the fatigue or monotony that the student might have experienced. Thus, some testing sessions were shorter than planned if the student was restless. Also, the order of the tests was arranged so that the student would encounter a continuing variety of testing methods, such as verbal or nonverbal tasks, oral or written tasks, and manual or comtemplative skills.

The testing order that was generally followed is as follows:

First Session: Attitudes Toward Reading
Self-concept Cards
Wechsler Intelligence Scale for Children

Second Session: Modified Test Anxiety Scale for Children
Asking (Torrance Creativity Activity 1)
Causes (Torrance Creativity Activity 2)
Consequences (Torrance Creativity Activity 3)
California Test of Personality
Unusual Uses (Torrance Creativity Activity 5)
Children's Personality Questionnaire -- Form A_1
Unusual Questions (Torrance Creativity Activity 6)
Product Improvement (Torrance Creativity Activity 4)
What I Would Like to do Best

Third Session: Motivation Questionnaire
Just Suppose (Torrance Creativity Activity 7)
Torrance Creativity With Pictures -- Activities 1, 2, and 3
Children's Personality Questionnaire -- Form A_2

At the conclusion of the testing sessions, the grade two students were given two dollars each for their participation while the grade four and six students were given three dollars each. (The extremes of students' personalities were poignantly demonstrated when some students saw the payment as a generous gift, and other students considered it as an insufficient trifle.)

All 23 classrooms were given the sociogram "Tell Me Who". Students were told that this was a project from the University of Alberta, that it was not a test, that they would not be marked, and that their teachers would not see what they had written. Care was taken to include the students who were absent on that day, and also that students having the same first name in the classroom were identified by including their last name or initial in cases where someone used their names.

The teachers of the students chosen for the study were asked to fill out three questionnaires about these students ("Teacher's Evaluation of Student's Behavior", "Teacher Interview", and "Teacher Questionnaire"). As 8 teachers had 2 students from their classrooms participating in this study, these teachers had two sets of questionnaires to fill out.

Two questionnaires were also given to the parents to complete. One questionnaire (i.e., "Mother's Questionnaire") was designed specifically for the mother only. She was required to show the extent of her approval or disapproval to many questions about child-raising. The other questionnaire ("Parental Questionnaire") could have been completed by either parent.

There were no specific tests given that attempted to assess the students' achievements in reading or in other subject areas. However, the students' abilities in these areas were implied by referring to their cumulative records. Two types of information could be found: the students' report card marks and their gradings on standardized tests (both intelligence and achievement). No standardized reading achievement tests were included in the battery of tests given to each student. It was felt that this achievement assessment would be fairly time-consuming, and in all cases there were already achievement scores available for the students.

Other types of achievement data were derived from parental, teacher, and student questionnaires. Such questionnaires sought answers for queries of the number of books that the student read within one week, nature of the books, average time spent at reading in one day, frequency of borrowing books from libraries, and so forth.

It can be seen, then, that the information gained from the cumulative files demonstrated the student's ability and achievement in reading.

III. DESCRIPTION OF THE SAMPLE

Thirty-six children were the subjects of this study -- 12 from grade two, 12 from grade four, and 12 from grade six. Although they were not selected according to any sex quota, the proportion of boys to girls was equal, constituting 18 boys and 18 girls. Eleven children came from rural homes, while the remaining 25 resided in urban settings. This information is summarized in Table 3.1.

TABLE 3.1

DISTRIBUTION OF SUBJECTS BY GRADE AND SEX

GRADE	NUMBER OF MALES	NUMBER OF FEMALES
2	5	7
4	6	6
6	7	5
TOTAL	18	18

The mean Blishen (1967) socio-economic index for the subjects was not calculated. It was felt that the children were fairly representative of the middle-class population, and that changes and fluctuations in Canada's economic stability would have rendered Blishen's index based on parents' occupations less meaningful than in previous years.

The "Self-concept Cards" questionnaire was administered to a grade two class, a grade four class, and a grade six class from the same schools from which the subjects were chosen. There were a total of 77 students completing this self-concept questionnaire. The distribution of these children by grade and sex is summarized in the following table.

TABLE 3.2

DISTRIBUTION BY GRADE AND SEX OF CHILDREN GIVEN THE "SELF-CONCEPT CARDS" QUESTIONNAIRE

GRADE	NUMBER OF MALES	NUMBER OF FEMALES
2	11	11
4	17	11
6	13	14
TOTAL	41	36

Further information of a demographic nature is presented in the following chapter. The results of the various testing instruments are also summarized in the next chapter in sections representing the specific areas assessed.

Although reading ability and other achievement levels were not directly appraised, cumulative files and report card marks were very revealing. Results of standardized tests such as the New Developmental Reading Tests, Schonell Spelling Test, and STA (arithmetic) tests were frequently available in the cumulative records. Four categories of achievement scores were obtained, and are given in Table 3.3.

TABLE 3.3

SUMMARY OF MEAN ACHIEVEMENT GRADE SCORES OF SUBJECTS

AREA OF ACHIEVEMENT	GRADE 2	GRADE 4	GRADE 6
Reading vocabulary grade scores	5.13	7.78	9.99
Reading comprehension grade scores	4.86	8.39	9.54
Arithmetic percentage scores[1]	79.3%	75.9%	76.1%
Spelling grade scores	4.13	6.73	8.15

[1] Arithmetic scores were not usually listed as grade scores, but instead were given as percentages.

The scores used in Table 3.3 were taken from the students' records at the end of the school year. So, for example, a subject just completing grade two would be expected to achieve in the grade 2.5 to 3.5 range. Some reading tests used by the school boards of these subjects are often considered as measuring too high, or as suggesting a reading achievement level which is one year higher than the student's actual reading level. This was claimed in particular about the New Developmental Reading Test, a test customarily used to assess students. Taking these considerations into account, it is still evident that the grade two students used in this study have a reading level far superior to that of their classmates.

The superiority of reading achievement of these avid readers was evident throughout all grades - two, four, and six; and as a matter of interest, the vocabulary score (9.99) would have been much higher for the grade six subjects if the top level of the test were expanded. It was not uncommon to find reading levels of grade 9 and 10 for some grade six students in this sample.

Arithmetic scores indicated that throughout the elementary grades these avid readers were reasonably fluent and consistent in their mathematical achievement.

The spelling grade scores also reflected a superior performance by the avid readers throughout the elementary grades. At the end of grade two the avid readers scored about one year beyond their expected spelling achievement level. This difference remained stable to grade six, but it was not as great a difference as was the reading achievement.

In summary, then, the reading achievement (in terms of vocabulary and comprehension) of the avid readers, as suggested by the results of standardized reading test scores given on the students' cumulative records, was superior to that of their classmates. The avid readers also excelled in spelling achievement, while arithmetic ability similarly remained above average. These performances were consistent throughout the grade levels assessed.

A review of the previous academic records of the avid readers indicated that they were generally good students whose reading abilities were high since they were first assessed in grade one or two. An examination of their performances in other areas (such as science, social studies, music, and so forth) showed that they were likewise superior students.

However, the academic excellence of avid readers was not a global trait. While it was true that many teachers described these avid readers as excellent achievers, this trait was not universal. A grade two boy received below average marks on his report cards, scored low on standardized tests, and would likely repeat a grade before he finished school. One grade six boy had repeated grade five in spite of reading being his strongest area (average). Finally, one girl in grade six had received generally below average scores throughout her six years of elementary school even though she had not repeated any grades. At the time of testing her performance was low enough to warrant con-

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sideration of placing her in a grade seven "learning assistance" classroom.

It cannot be stressed enough that these seeming "oddities" who do not fit the academic pattern of avid readers were carefully verified a second time by this researcher as being avid readers. This was done by once again consulting their former teachers to see if some error had been made.

It is interesting to note that these three children mentioned above came from obviously broken homes. Only two interviews out of 36 were not granted by the parents -- both of these interviews concerned two of the three children being discussed here. The third interview, carried out under trying conditions, revealed poverty, neglect, and other qualities of a family wrought with turmoil. In addition to the low academic performance and family instability, these three children were also left-handed, a most unusual finding which is expounded further in this chapter.

IV. TESTING INSTRUMENTS

The tests that were chosen or constructed for this study reflected diverse characteristics of the students.

The study was designed to reveal many possible contributing factors of reading motivation. In essence, the question is: "Why do children read books?" Thus, the nature of the tests selected should reflect several underlying traits of voracious readers. These tests, when taken as a whole, might suggest patterns of motivational characteristics of avid readers. The intrinsic motivation to read is not a readily measurable characteristic. Motivation is a personality or emotional trait that is manifested behaviorally. Therefore, it is through behavior testing then, that inferences may be made about the student's motivation.

The rational for selection of tests can be regarded from seven categories. The first, achievement, has already been presented in the previous section that discussed the sample characteristics.

A. Intelligence

Several studies (such as Levine and Fuller, 1972; Rugel, 1974; and Searls, 1975) examined the intelligence scores of poor readers or of gifted readers, and concluded with a profile of intelligence subtests or traits that correlate with reading ability.

In this study an individually-administered intelligence test, the Wechsler Intelligence Scale for Children (Wechsler, 1949) was given to all subjects for the purposes of establishing any subtest profiles or patterns of avid readers, (ie., the intellectual traits that correlate with reading motivation), as well as to obtain an indication of the intellectual potential of the avid readers.

The scores of the WISC were compared to any group-administered intelligence test scores that were available for some students.

B. Creativity

One of the concerns of this study is with the effects that much reading activity has upon students. One such effect might be on the diverging (as compared with converging), fluid, creative expressions of avid readers. One could argue that the experiences of reading enhance one's repertoire of ideas, and lead to more variation and flexibility in expression.

However, the relationships between creativity and personality or intelligence, for example, are not very clear. Originally a study by Getzels and Jackson (1962) suggested that creativity is more important than intelligence in determining academic achievement (cited in DeCecco, 1968). A foremost authority on creativity, E. Paul Torrance (1966) does not state for certain what he believes to be the relationship between intelligence, creativity, and achievement.

Not altogether clear is the impact that motivation has upon creativity and intelligence. This study, then, examines not only the creativity-intelligence relationship, but also the motivation versus creativity-intelligence element.

Creativity, in this study, was assessed by the Torrance Tests of Creativity (Torrance, 1966; Appendix J). A verbal form containing 7 subtests and a nonverbal pictorial form containing 3 subtests comprised the total test. Verbal Form A and Figural Form B were used in the main study.

C. Achievement Motivation

Some theories of motivation emphasize the degree of success, recognition, or gain that one receives from certain behaviors. For example, many students would be highly motivated to do well in their school work because of the extrinsic or intrinsic reinforcement gained by such behavior. In identifying a person's motivation to achieve, researchers often employ projective techniques, with the assumption that motivation is not readily identifiable and must be ascertained by indirect methods. Thus, the statements that a child makes while talking about specific pictures, for example, would reflect his or her motivation toward some goal.

McClelland, Atkinson, Clark, and Lowell (1953) and others since then (eg. Adkins and Ballif, 1972) utilize story-telling and similar projective techniques such as the Thematic Apperception Test, (Murray, 1943) to infer the child's motivation toward achieving.

Because these projective tests yield only achievement motivation, it was decided to seek tests which might suggest a broader scope of motivation; for example, to be alone, or to fantasize, or to seek passive activities, to read and so forth. Objectively-scored tests were also desirable, because projective tests frequently are difficult to score.

The "Measure of Intellectual-Academic Attainment Value" (Crandall, 1969) which was renamed "What I Would

Like to Do Best" (Appendix E_1) for this study, matches 10 statements in a forced-choice situation. In other words, two desirable options were presented to the students who were required to select only one alternative. In this manner the students were eventually "forced" to choose the items or activities most important to them. Results would suggest which of the following activities the students would be motivated toward: social activities, academic prowess, and sensual goals.

Sweney and Cattell (1966) developed an instrument called the School Motivation Analysis Test (SMAT) (Appendix E_2), in this study renamed the "Motivation Questionnaire". They claimed to have isolated 15 factors (Cattell, Sealy, and Sweney, 1966), some of which are "ergs" (or basic primary drives such as fear, assertion, and sex), and some of which are "sentiments", or socially acquired patterns of behavior (such as sentiments to family, school, and self).

The ergs which are identified by the SMAT are: assertion, sensuality, sex, gregariousness, narcissism, constructiveness, protectiveness, curiosity, pugnacity, play fantasy, and acquisitiveness; while the identified sentiments include: self, super ego, religion and patriotism.

In addition to the previously listed ergs and sentiments, Sweney (1967) identified some others such as: growth, integration, humor, dependency, security, aesthetic, and imitation.

Several alterations were made between Sweney and Cattell's (1966) original SMAT and the "Motivation Questionnaire" used in this study. Instead of dichotomous "yes-no" responses, the degree of intensity of the students' responses could be further elaborated. Four possible choices were thus given to students: very much, quite a lot, not too much, and not at all; and in this manner students were able to show mild or extreme preferences for their affirmative or negative responses.

Minor substitutions were made for some words and phrases of the SMAT in order to be more meaningful to the younger children used in this study. These changes are presented in Appendix E_3.

Item 34 of the SMAT, ie., "I want to spend more time with my girl or boy friend", was thought to be inappropriate for the subjects of this research, and so it was replaced with another item, ie., "I want to read more books than my friends".

It should be noted that the tests used in this section seem to assess motivation toward achievement as well as motivation toward other fields. What the results of these two specific motivation tests would indicate would be the subjects' preferences (or attitudes) toward specific activities, but these tests would not necessarily reveal to what extent the subjects actually sought after these preferences (in terms of observable behaviors).

To state that a student is motivated toward an activity such as reading is to imply that the student has both a positive attitude or preference toward reading and furthermore engages in actions of reading. Thus, the motivation to read includes both a feeling or value, plus overt behaviors toward a goal.

D. Personality and Attitudes

Many studies link some aspect of personality to some aspect of reading achievement. Self-concept is often seen as an important correlate to and frequently a causal factor of success in reading achievement. A trend of ten years ago was to associate reading difficulties with deviations in personality. More recently the emphasis has been on enhancing a student's reading ability by developing the student's positive self-concept (see Quandt, 1972, for example).

This study utilized several personality-type tests to suggest various dimensions of the students' affective domains (as compared to the cognitive domains).

Self-concept assessment. A positive self-concept is a common personality trait often associated with reading achievement. Several self-concept scales were amalgamated in this study to produce one large Likert-type scale. The Way I Feel About Myself (Piers and Harris, 1969), Perkins (1958) Q-Sort self-concept scale, Self-Esteem Inventory (Coopersmith, 1967), Lipsitt's (1958) self-concept questionnaire, and the Children's Form of the Manifest Anxiety Scale (Castaneda, McCandless, and Palermo, 1956) were analyzed and reduced to one large self-concept assessment called the "Self-concept Cards" (Appendix A_9) in this study. Several items from the previous instruments were altered, deleted, or expanded. Several items were also added that were not previously questioned.

The modified self-concept questionnaire took the form of 200 items typed on 3 x 5 inch index cards. These cards were shuffled and presented to each subject in random order at one setting. Subjects were asked to put the cards into one of five boxes which were labelled: always, most of the time, sometimes, hardly ever, and never. Instructions to the students stated that students should put each card into a box that indicated how frequently he or she felt what each item stated, or how frequently they would think about that item. For example, responses to the question, "I do many bad things" reflect the frequency of some specific behavior, while responses to "I have a pleasant face" would indicate the frequency that the subject would think that he or she did have a pleasant face.

The "Self-concept Cards" suggest students' attitudes toward the family, school, friends, personal appearance, ability, physical health, anxiety, personality, and so forth. In general, these and other traits reflect the students' perceptions about themselves, or how well or poorly they "see" themselves, ie., their self-concepts.

There were several changes and additions made to the sources cited previously in deriving the 200-item "Self-concept Cards". Most of the items were taken from The Way I Feel About Myself (Piers and Harris, 1969). Appendix A_1 gives this self-concept questionnaire in its original published form. Appendix A_2 lists the changes made to eleven of Piers and Harris' items. Terms such as "always" and "often", which indicate the frequency that a child might encounter the feeling expressed in the item were omitted because the students responded by placing the cards in one of five frequency boxes already described earlier.

Perkins (1958) used a 50-item self-concept scale for children in grades four and six (see Appendix A_3). Seventeen of his items were already presented in a similar form in the Piers and Harris (1969) self-concept scale, and were thus not included in the items borrowed. As well as the previous 17 omitted items, 8 other items were also dropped because it was thought that they would have given little relevant information to the already lengthy "Self-concept Cards". Appendix A_4 details the changes and omissions made to the Perkins' self-concept scale.

Coopersmith's (1967) Self-Esteem Inventory (Appendix A_5) presents 58 statements which require a positive or negative response, ie., students respond to descriptive statements by saying whether the statements are "like me" or "unlike me". Of these 58 statements, 32 were used directly into the "Self-concept Cards", and were incorporated into items 113 to 144 inclusive. The other 26 statements were already given elsewhere in the "Self-concept Cards", and were not presented again.

As in the previous self-concept scales, some items were modified slightly. Several items omitted terms of frequency such as "always" and "usually". Also, all negative statements were altered to their affirmative forms.

Appendix A_5 gives the original Self-Esteem Inventory, while Appendix A_6 lists the alterations made to Coopersmith's original self-concept scale.

Lipsitt (1958) presented his subjects in grades 4, 5, and 6 with a 22-item self-concept scale. They were to respond on a 5-point rating scale similar to the one used in this study to a series of adjective-descriptions. His adjectives were incorporated in the "Self-concept Cards" into the following items: 145, 2, 146, 134, 147, 35, 80, 84, 22, 58, 128, 70, 55, 148, 54 (and 60 and 72), 149, 34, 37, 150, 6, 86, and 151.

The "Children's Form of the Manifest Anxiety Scale" (Castaneda et al, 1956) was the last major self-concept inventory added to the "Self-concept Cards" (see Appendix A_7). Once again, here 11 items were already tested elsewhere and were thus not included within the other items in this section (see Appendix A_8).

Many of the changes made to the items of the "Self-concept Cards" were made after the pilot study. Students asked for assistance in answering statements of negation, such as, "I do not like arithmetic", and some younger students sought clarification for several difficult items. Because of these difficulties, many statements had the negative terms removed, while other statements were reduced to simpler phrases.

Four items were added to the original list of 196 items used in the pilot study. The additional items are:

43A I get worried when we have tests.
44A I worry about passing to the next grade.
45A I can read out loud without making mistakes.
46A I feel relaxed when I am in school.

The first two additional items were used as a comparison to the students' responses on another anxiety questionnaire. The third item attempted to gain another perspective of the students' reading attitudes, while the fourth item assessed another dimension of the students' attitudes toward school.

In summary, then, the 200 items of the "Self-concept Cards" (Appendix A_9) were essentially taken from several sources described below:

Items 1 - 84	from Piers and Harris (1969)
Items 85 - 112	from Perkins (1958)
Items 113 - 144	from Coopersmith (1967)
Items 145 - 151	from Lipsitt (1958)
Items 152 - 154,	and items 22, 32, 42, 78, 95, 103, 107, and 43A to 46A were constructed by this researcher
Items 1A - 42A	from Castaneda et al (1956)

Anxiety. One aspect of personality and self-concept which was examined further was that of anxiety. An anxiety questionnaire by Castaneda et al (1956) was already incorporated into the "Self-concept Cards", (Appendix A_9) while the anxiety scale of Sarason, Davidson, Lighthall, Waite, and Ruebush (1960) was modified and used as a separate test.

Anxiety is commonly seen as an attribute of poor readers, and hence good readers should logically have less anxiety. But avid readers, who at this stage may be considered neither poor nor good in reading achievement, would reasonably be expected to be average in their general and specific anxieties. Thus anxiety was one personality trait that was specifically assessed by the "Self-concept Cards" (Appendix A_9) and also by the "Test Anxiety Scale for Children" (Sarason et al, 1960) (Appendix B_1), which was slightly modified by Feld and Lewis (1969) (Appendix B_2), and further modified for this study by this researcher.

The nature of the modifications were to simplify the questions for the younger students, and to enable easy scoring of the test. An illustration of the series of modifications is shown in this example (item 6):

> When the teacher says that she is going to find out how much you have learned, does your heart begin to beat faster? (Sarason et al, 1960)
>
> When the teacher says that she is going to find out how much you have learned, do you feel relaxed and comfortable? (Feld and Lewis, 1969).

When the teacher says that she is going to find out how much you have learned, do you feel relaxed and comfortable, or does your heart begin to beat faster?

(a) relaxed (b) heart beats faster
(final version)

Appendix B_1 shows the original "Test Anxiety Scale for Children" by Sarason et al; Appendix B_2 shows the version by Feld and Lewis, while Appendix B_3 gives the combined versions as finally used in this study.

Standardized personality tests. Two standardized personality tests were also given to the students. The results of these normalized tests could be compared to each other, to the results of the "Self-concept Cards" (Appendix A_9), to the teacher's behavioral descriptions, and to other similar information gained from the battery of tests.

The two tests each measure different areas of personality. The Children's Personality Questionnaire (CPQ) (Porter, Schaie, and Cattell, 1965), renamed "What You Do and What You Think" for this study (see Appendix C_1) indicates 14 personality dimensions: reserved-outgoing, intelligence, impulsive-emotionally stable, inactive-excitable, obedient-assertive, serious-happy go lucky, expedient (disregards rules)-conscientious, shy-venturesome, realistic-sensitive, active-circumspect, forthright-shrewd, self assured-apprehensive, causal-controlled, and relaxed-tense.

The CPQ was used in this study without any modifications, other than slight changes in the format of the test. Forms A_1 and A_2, each containing 70 items, were given to the students who chose one of two (occasionally three) alternatives for each item.

The California Test of Personality (CTP) (Thorpe, Clark, and Tiegs, 1953) (Appendix C_2) suggests two major areas of personality, i.e., personal adjustment and social adjustment. Traits included in the former dimension consist of: self-reliance, sense of personal worth, sense of personal freedom, feeling of belonging, withdrawing tendencies, and nervous symptoms. Those characteristics of social adjustment include: social standards, social skills, anti-social tendencies, family relations, school relations, and community relations.

In the pilot study the CTP, in the Primary and Elementary Forms, was given in its original form, but several items were subsequently changed.

The most common change occurred in substituting the word "parents" for "folks". It was thought that "parents" would be a more familiar term to the students rather than "folks". Some of the younger students in the pilot study were not aware of this word's meaning.

The second most common change was in replacing the term "mind" with "listen to". For example, item 112 in the Elementary Form was changed from "When your folks make you mind are they usually nice to you about it?" to "When your parents make you listen to them are they usually nice to you about it?" This change was also made with the intention of facilitating readability of the items.

Although the changes made were only to one or two words in each question, the essence of the question was not altered. Appendix C_3 itemizes these minor changes made.

Attitude. Another important attribute of personality is attitude. In this study the students' attitudes toward reading, school, achievement, and other areas were assessed by directly questioning the students, and by asking parents and teachers to give their impressions of the students' attitudes.

A questionnaire labelled "Attitudes Toward Reading" (Appendix D_1) was actually an incorporation of questions on attitudes taken from two other attitude questionnaires -- McClendon (1966) and Brookover, Paterson, and Thomas (1962). Some other items from the researcher also were combined to produce this attitude questionnaire for the students.

The pilot study used, among other questionnaires, two separate questionnaires entitled "Initial Interview" (Appendix D_2) and an earlier version of "Attitudes Toward Reading" (Appendix D_1). The former was designed to introduce the student to the testing program, while the latter was used to get an idea of the students' reading activities and attitudes. For the main study, the "Initial Interview" was dropped. It was felt that six items on it were being questioned again, and five other items were unimportant in the sense of giving little revelent information toward this study.

The teachers and parents filled out questionnaires that sought information on the students' behavioral traits as well as reading attitudes. These questionnaires are discussed later in this chapter.

In summary, the students' personalities were ascertained in this study by the following test instruments: "Attitudes Toward Reading" (Appendix D_1), "Self-concept Cards" (Appendix A_9), "Modified Test Anxiety Scale for Children" (Appendix B_3), California Test of Personality (Appendix C_2), and the Children's Personality Questionnaire (Appendix C_1).

E. Behavioral Observations

The behavioral traits of avid readers mentioned above were sought from three sources -- the teacher, the parents, and the other children in the classroom.

The purpose of the questionnaires was to provide a behavioral description of the subjects from several points of view. The nature of the questionnaires was both descriptive in the sense of asking others about the subjects' actions, and attitudinal in the sense of asking others about their impressions of the subjects' attitudes toward reading, school, friends, and so forth.

Teacher source. Each teacher of the students selected as avid readers was given three questionnaires to complete.

A portion of the Teacher Rating Scale for Pupil Adjustment (Andrew, Hartwell, Hutt, and Walton, 1953)

(Appendix F_1), was used in this study. Eleven questions depicting emotional, social, and academic adjustments were given to the teachers in an instrument labelled "Teacher's Evaluation of Student's Behavior" (Appendix F_1) for this study. The teacher responded to each question by checking one of five multiple-choice responses indicating the student's tendency toward the trait described. The items by Andrew et al were unchanged for this study.

The Scale for Rating Behavioral Characteristics of Superior Students (Renzulli and Hartman, 1971) (Appendix F_2) was initially used by Renzulli, Hartman and Callahan (1971) in screening and identifying superior students. They intended the observation scale to objectively assess four areas: learning, motivation, creativity, and leadership qualities.

Their scale was incorporated into this study as the "Teacher Interview" (Appendix F_4). Whereas they requested the teachers in their study to respond on a 4-point scale (seldom, occasionally, to a considerable degree, almost all the time), the "Teacher Interview" allowed a 6-point response scale which included Renzulli and Hartman's 4 choices, plus "never" and "absolutely all of the time" -- extreme positions of the scale. It was felt that the inclusion of the extra two responses would allow for any truly unique characteristics of the avid readers to be noted.

The original scale by Renzulli and Hartman contained 37 items, many of them multi-facetted. This particular instrument was originally designed to be given personally to the teacher in an interview situation. But because of the impracticality of meeting at great length with many teachers, this instrument was redesigned in two ways. First, so that the teacher could complete it on his or her own time, the directions were altered and responses were modified requiring the teacher merely to write a number for each item. Second, on the suggestion of some teachers, four items were broken up into composite parts, so that teachers might illustrate further fine differences in the student's behavior than the general question might have allowed.

Also included in the "Teacher Interview" (Appendix F_4) were 16 items from "An Attitude Scale for Reading" (Rowell, 1972; Appendix F_3). Using fourth- and fifth-grade students, Rowell was able to effectively identify their attitudes toward reading. Although he used a 5-point Likert scale, a 6-point Likert scale was continued throughout the "Teacher Interview". No changes were made to Rowell's original items.

C. P. Smith (1969b) used 31 items in his "Teacher Ratings" (Appendix F_5) to evaluate teachers' impressions of students' behaviors and attitudes. The items were based on a 5-point Likert scale, and were adopted without change into the "Teacher Questionnaire" (Appendix F_5) for this study.

Parent source. As in the case with the teachers, the parents were also given three questionnaires. The first questionnaire below was completed by this researcher in an interview situation, while the latter two questionnaires mentioned below were completed by the parents on their own time at home.

In Sarason's et al (1960) "Parent Interview Schedule" 115 questions were asked about the child's reactions to school, teachers, friendships, and so on -- as well as questions about the parents' attitudes to discipline and childrearing. Of the original 115 items in the "Parent Interview Schedule" 44 were chosen for this study's "Parent Interview" (Appendix G_1). Another 16 questions were added that dealt with the family's and student's reading habits (items 37, 45, 46, and 48 to 60), for a total of 60 questions. The "Parent Interview" was completed after all other testing of the students. In this way feedback could be given to the parents concerning their child's performance on the tests.

There were several changes made to this questionnaire from the pilot study to the main study. Item 40 from the original questionnaire was omitted from the final questionnaire:

> Some doctors have said that it is best for a baby to be taught to eat and to go to sleep at certain times. Other doctors have said it is best if a child is fed when he is hungry and goes to sleep when he is sleepy. What is your opinion? What did you do?

The underlying idea that this question was attempting to reveal was tested more directly in other questions of this questionnaire.

Item 41 was also dropped: "Has __________ ever had nightmares? When? What did you do about it?" It was felt that the information that this question might have given was not as important as some other questions that needed to be asked.

Item 42 was dropped: "Different children seem to be afraid of different things? When __________ was _much younger_ what were the kinds of things he was afraid of?" Another question on this questionnaire asked the same idea more specifically.

The following items were added to the original interview:

> [1] What languages are spoken around the house, and is __________ exposed to any other language besides English?
>
> What kinds of books does the father read?
>
> What kinds of books does the mother read?
>
> Do you have any religious affiliation?

A second questionnaire borrowed from Sarason _et al_ was their adjective check list, which was basically a 5- and 6-point Likert scale. Here parents were asked to indicate the extent to which their children possessed a personality trait, and also the extent that the parents felt that it was important for their child to possess some traits. All of their 25 items were used. In addition, 20 items were taken from C. P. Smith (1969b) and 3 further items were added to produce a 48-item questionnaire called the "Parental Questionnaire" (Appendix G_2) for this study.

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[1] In the pilot study, four of the six students spoke another language -- 2 were Japanese, 2 were German.

The third questionnaire was directed at the mothers of the students. Entitled "Mother's Questionnaire" (Appendix G_3), this instrument was taken from Coopersmith (1967). This questionnaire was designed to reflect three parental attitudes toward children: democracy versus domination, acceptance versus rejection and indulgence versus autonomy (after Baldwin, Kalhorn, and Breese, 1949; and Shoben, 1949). Mothers were asked to disagree (mildly or strongly) or to agree (mildly or strongly) to 80 statements concerning parent-child relationships. In Coopersmith's questionnaire, items 40 and 61 were omitted by him, and so were replaced in this study with the following:

Item 40: Children should be taught how to read even before they go to regular school.

Item 61: Learning to read is the most important thing for the child to learn in school.

Peer source. A third means of gaining observational information about the subjects was that of peer impressions. This was done in the form of a sociometric device, "Tell Me Who" (Appendix H). Whereas the parents' and teachers' questionnaires were the assessments of one or two individuals about a student already selected and made known to them, the sociometric instrument was a group interpretation of many possibilities in the classroom. As each classroom filled out the sociometric questionnaire, the students were told that they could select anyone they wished for their answers (including classmates absent that day, but excluding friends from outside the class). The addition of item 12, "Who do you think likes reading best in the class?" was the only change made to the version used in the pilot study.

The tabulations in the form of a sociogram will reveal to what extent the subjects of this study are popular or unpopular in their classrooms. Also will be suggested is the general impression of the class with respect to the students that the class sees as being smartest, the leader, the person reading the most books, and the most enthusiastic about school.

F. Demographic Data

Although there were no tests used in this research designed solely for the purposes of gathering demographic information about the students, specific items of several tests will suggest this data.

The "Parent Interview" (Appendix G_1) yields information on ordinal position, sibling constitution, presence or absence of either parent in the home, religion, socio-economic status and so forth.

The cumulative files would give further information concerning previous academic performance and school history.

G. Conclusion

As much information as possible was gathered about the students. Personality, academic, social, and motivational traits are only some of the major areas examined in depth.

The characteristics of avid readers are hitherto not well documented, and it was expected that some truly unique and idiosyncratic trends would be revealed by the battery of information-gathering instruments.

V. TREATMENT OF DATA

There were a total of 16 different testing instuments used in this study. The manner in which the information and data is treated from these instruments is discussed in the following chapter.

CHAPTER IV

FINDINGS AND RESULTS

This chapter is presented in two major sections. The first section delineates specifically the manner in which the information gathered from the many test instruments was scored and quantified. The second section presents a summary of the major findings derived from the data.

I. PROCEDURE

Several test instruments used in this study had very little or no changes made to them. Consequently they were administered and scored according to the directions given in their respective manuals. The tests included in this category are: the California Test of Personality (Thorpe et al, 1953) (Appendix C_2), the Children's Personality Questionnaire (Porter et al, 1965) (Appendix C_1), the Wechsler Intelligence Scale for Children (Wechsler, 1949), and the Torrance Tests of Creativity (Torrance, 1966) (Appendix J).

Of these above tests the Torrance Tests of Creativity is the most subjective in the scoring procedure. The writer scored these creativity tests according to the directions in the manual; but to ensure that these scores were reliable, a second marker also scored the tests -- using only the manual as a guide.

The mean Pearson product-moment correlation coefficients of these two sets of scores as reported by

Torrance (1966, p. 19) were: fluency, .99; flexibility, .95; and originality, .91 for the verbal tests; and fluency, .96; flexibility, .94; originality, .86; and elaboration, .91 for the nonverbal (figural) tests.

This compares with the following Pearson product-moment coefficients obtained in this study: for the verbal tests -- fluency, .99; flexibility, .95; and originality, .93; while for the figural tests -- fluency, .99; flexibility, .86; originality, .96; and elaboration, .99. It would seem that the markers of this creativity test were consistent in their scoring procedures, and that they had basically followed the scoring instructions as given in the manual.

As the "Self-concept Cards" (Appendix A_9) were derived from six different sources, each having a different scoring system, it was necessary to establish a new method of scoring. The first step was to divide the 200 cards into two categories. The first category was labelled "positive" in the sense that the placement of a card into a high-frequency box such as "always" and "most of the time" demonstrated a positive self-image (eg., item 80, "I can be trusted"). The second category labelled "negative", included responses in which a high-frequency indicated a negative or poor self-concept (eg., item 26, "I behave badly at home"). Most items clearly fell into either category and several items which were not clearly negative nor positive were verified as such by another rater.

The second step was to identify the characteristic that the 200 cards were attempting to reveal. Seven characteristics were identified: behavior, school-related functions, physical status, anxiety, popularity, general happiness, and family relations. More areas could have been defined, but the above seven seemed to be the most important.

After the self-concept characteristics were identified it was necessary to place each self-concept card into one of those areas. Although some of the cards could have been included in more than one area, it was felt that the elaboration of these areas as separate from a global self-concept score might be useful.

In order to place the cards as accurately as possible into the categories, five raters were used. These raters were all educationalists familiar with school settings. They were given the seven categories and were asked to place each card into a category according to what they felt was the major theme of that card. In 31 cards all five raters achieved unanimous agreement. In 61 cards, four raters reached agreement; while in 85 cases, three raters agreed upon the category. In the remaining 23 cases, two categories received equal votes, and so a sixth rater was used to break the tie. Appendix A_{10} gives the seven categories and which self-concept cards were included in each area.

Scores for each area were obtained by giving weights of 5, 4, 3, 2, and 1 respectively for responses of "always", "most of the time", "sometimes", "hardly ever", and "never" for those cards labelled "positive"; and weights of 1, 2, 3, 4, and 5 respectively for responses of "always", "most of the time", "sometimes", "hardly ever", and "never" for those cards labelled "negative". In this manner a numerical score could be ascertained for the student in each of the seven areas of self-concept as well as a total self-concept score.

For comparative purposes the "Self-concept Cards" (Appendix A_9) were also given to one grade two class, one grade four class, and one grade six class. The mean self-concept scores in these classroom tests were compared to the self-concept scores of the subjects in this study. The method of presenting the self-concept items was varied to accomodate a classroom setting. The items were duplicated on individual answering sheets. After each item students could check off one of the responses of: "always", "most of the time", "sometimes", "hardly ever", and "never". Thus the items remained the same as those used in assessing the avid readers, but only the responding technique was altered. It was felt that this slight modification in the manner of responding made very little, if any, difference in the outcome than if the response boxes were used. None of the students given this group form of the "Self-concept Cards" was used as one of the 36 avid-reader subjects. Sufficient scores were gathered to warrant norms for both boys and girls at each of the grade levels.

The scoring of the "Modified Test Anxiety Scale for Children" (after Sarason _et al_, 1960; Feld and Lewis, 1969)

(Appendix B_3) was straightforward. Of the 30 items, a simple count was made of the number of items where a response indicated test anxiety. Thus the higher the score on this instrument, the more one's anxiety about test situations.

Much of the information given in the "Initial Interview" (Appendix D_2) and "Attitudes Toward Reading" (Appendix D_1) was descriptive and not conducive to numerical evaluation. However, some questions were amenable to numerical presentation, but it is very important to remember that the responses are the students' perceptions of events (which may be different than the occurrence of the events themselves). The following information was gathered in the form of numbers:

1. the number of minutes spent weekly in reading at home
2. the number of minutes spent weekly in free reading at school
3. the number of books and magazines the family has at home
4. the number of books and magazines that the student has at home
5. the number of visits made to the community library monthly
6. the number of visits made to the school library monthly
7. the number of minutes per week that someone read to the student before he started school

8. the number of minutes per week that the mother reads to herself

9. the number of minutes per week that the father reads to himself

10. perception of school ability, reading ability, reading avidness, reading importance, and importance of good grades, i.e., questions 32, 33, 34, 35, and 36 of the "Attitudes Toward Reading" (Appendix D_1). (The responses showing greatest value or importance were given a weight of 5, while other statements of decreasing value and importance were given corresponding weights of 4, 3, 2, and 1.)

Much of the above information was also gathered by the "Parent Interview" (Appendix G_1). In addition to these preceding perceptions, the following test scores were taken from cumulative and other records:

1. most recent reading vocabulary scores
2. most recent reading comprehension scores
3. most recent arithmetic scores
4. most recent spelling scores
5. any intelligence test scores (usually the Primary Mental Abilities Test for grade one, and the Lorge-Thorndike Intelligence Test for grade four). Much information from the attitude questionnaires in descriptive terms was nevertheless still used to identify characteristics of avid readers, even though these characteristics could not be quantified.

From the questionnaire "What I Would Like to do Best" (Appendix E_1), three themes were identified. These three themes and the corresponding items are:

1. Social relations
    - (a) be the leader of your friends
    - (b) have lots of kids like you
    - (c) have other people do what you want them to
    - (d) always have your friends want you to play with them
    - (e) have someone you can talk over your troubles with
    - (f) always have someone who can help you when you need help
2. Academic achievement
    - (a) be able to understand new ideas
    - (b) be able to do well in your school work
3. Sensual goals
    - (a) have all your clothes, chairs, and beds be comfortable
    - (b) have good things to eat

Combinations of the above choices were presented two at a time in 16 pairs. The student's preference in each pair was credited as 1 point toward one of the three themes. In this way, an indication of the student's preference toward social, academic, and sensual goals could be shown.

Sweney and Cattell (1966) identified many ergs and sentiments in their School Motivation Analysis Test

(Appendix E_2). Rather than include one or two items for one erg, several ergs were combined. For example, item 55, "I want to go on more picnics" was classified as a "hunger" erg by Sweney and Cattell. Since this item was the only one related to a "hunger" erg, it was included in the category of a "sensuous" erg instead.

The ergs (or motivational drives) derived from the SMAT, and the items related to each erg are:

1. sensuous: items 1, 13, 19, 55, 56, 57
2. narcissism: 2, 51
3. gregarious: 3, 4, 7, 8, 16, 32, 41
4. growth: 5, 6
5. humor: 9, 10, 29, 45
6. dependency: 11, 12, 18, 31, 38, 39, 59
7. sex: 14, 36, 47, 52
8. aggression: 15, 30, 33, 37, 40, 46
9. independency: 17, 54
10. school ability: 20, 23, 25, 34, 43
11. play: 21, 28, 48
12. curiosity: 22, 27, 58, 60
13. aesthetic: 24, 26
14. protective: 35, 42, 53
15. acquisition: 44, 49, 50

A response of "very much" was given a weight of 5; "quite a lot" was 4; "not too much" was 3; and "not at all" was given 2. The preference of some ergs over other ergs could thus be calculated.

The "Teacher's Evaluation" (Appendix F_1) only had 11 items which were classified into 5 categories. Of the 5 multiple-choice responses possible for each question, the most favorable (or adjusted) response was given a weight of 5; while the other responses were given descending weights of 4, 3, 2, and 1 (for the response showing the most maladjustment).

1. adjustment: items 1, 7
2. maturity: 2, 11
3. emotionality: 3, 5, 6, 8, 9
4. aggression: 4
5. achievement: 10

The first section of the "Teacher Interview" (Appendix F_4) had scores tabulated for four areas. The higher the student's score in that area, the greater were his characteristics in that area:

1. learning: items 1 - 8
2. motivation: items 9 - 17
3. creativity: items 18 - 27
4. leadership: items 28 - 37

The second part of this questionnaire specifically assessed the student's attitude toward three areas of reading:

1. reading in the classroom: item 1 - 6
2. reading for pleasure: items 7 - 13
3. reading in the content areas: items 14 - 16

Scores were obtained for each of these three areas in the same manner as in the preceding questionnaire.

The last survey given to the teachers, the "Teacher Questionnaire" (Appendix F_5), contained 8 areas of personality traits singled out by this researcher:

1. independence: items 1, 10, 22, 23, 24, 28
2. self-concept: 2, 11, 14
3. emotionality: 3, 5, 30, 31
4. dependence: 4, 6, 15, 16
5. competitiveness: 7, 12, 13, 29
6. persistence: 8, 25, 26, 27
7. sociability: 9, 20, 21
8. creativity: 17

Scores were calculated for each of these areas by summing the responses (expressed as a number indicating frequency).

Of the many questions asked in the "Parent Interview" (Appendix G_1), only a few were chosen for numerical descriptions:

1. number of older siblings
2. number of younger siblings
3. attendance at some form of preschool
4. number of extra activities the student is involved in
5. attitude to the grade one teacher
6. attitude to the grade one classmates
7. number of minutes read to per week in preschool
8. number of minutes read to per week in grade one
9. attitude to present teacher
10. attitude to present classmates

11. difficulty in learning to read
12. number of fears
13. number of minutes that father reads weekly to himself at home
14. number of minutes that mother reads weekly to herself at home
15. number of minutes that the child reads weekly to himself at home
16. number of books and magazines in the home
17. religious affiliation
18. number of books taken out weekly by the child from the community library.

Many of the above questions were also asked directly to the students, and the answers were compared to those that the parents gave.

The "Parental Questionnaire" (Appendix G_2) was analyzed into several personality traits. The first scores describe to what extent the parent feels the child possesses the trait. The second set of scores (preceded by "S") taken from the second part of the questionnaire reflect the parent's wishes about how they feel the child should be (but not necessarily is):

1. mature: item 1
2. sociable: 2, S1
3. relaxed: 3, 10
4. optimistic: 4
5. responsible: 5, 25, S6

6. active: items 6, 9, 20, S10
7. self- satisfaction: 7, S16
8. introverted: 8
9. neatness: 11
10. leader: 12, S4
11. persistence: 13, S12
12. dependent: 14
13. generosity: 15, S3
14. ambition: 16, S13
15. plans: 17, 23
16. emotional: 18
17. sensuous: 19
18. affectionate: 21
19. adaptable: 22
20. rational: 24, S20
21. obedience: S2
22. creative: S5, S7, S19
23. independent: S8, S11, S15
24. curious: S9
25. competitive: S17, S18
26. ability: S21, S22, S23

Coopersmith (1967) did not specify how his "Mother's Questionnaire" (Appendix G_3) should be scored, so a procedure was adapted similar to that used in the other questionnaires of this research. He defined three major areas of parental attitudes. Each area has some subscales. Because he did not reveal what the contents of items 40 and 61 were, they were replaced with two items reflecting the mother's attitude toward the importance of reading.

1. Democracy versus Domination
    - (a) encouraging verbalization: items 1, 17, 33, 49, 65
    - (b) excluding outside influence: 2, 18, 34, 50, 66
    - (c) equalitarianism: 3, 4, 19, 20, 35, 36, 51, 52, 67, 68
    - (d) comradeship and sharing: 5, 21, 37, 53, 69
2. Acceptance versus Rejection
    - (a) breaking the will: 6, 22, 38, 54, 70
    - (b) irritability: 7, 23, 39, 55, 71
    - (c) rejection of homemaking role: 8, 24, 56, 72
    - (d) avoidance of communication: 9, 25, 41, 57, 73
    - (e) dependency of mother: 10, 26, 42, 58, 74
3. Indulgence versus Autonomy
    - (a) acceleration of development: 11, 12, 27, 28, 43, 44, 59, 60, 75, 76
    - (b) strictness: 13, 29, 45, 77
    - (c) intrusiveness: 14, 30, 46, 62, 78
    - (d) fostering dependency: 15, 31, 47, 63, 79
    - (e) approval of activity: 16, 32, 48, 64, 80

Each of the above areas was marked with scores of 4 for responses of "strongly agree", 3 for "mildly agree"; 2 for "mildly disagree", and 1 for "strongly disagree".

The sociogram indicated at least 5 pieces of information relevant to this study:

1. the number of times that the subject was chosen as a best friend (indicating extent of close peer relationships)

2. the rank order to the question of "Who would you like to sit beside?" (indicating popularity)

3. the rank order to the question of "Who would you not like to sit beside?" (indicating unpopularity)

4. the rank order to the question of "Who do you think reads the most books in the class?" (indicating peer perception of reading avidness)

5. the number of people chosing the subject as being the one reading the most books in the class (also indicating the extent of peer perception of reading avidness)

Other demographic data was included for analysis: sex, grade, rural/urban, handedness; as well as other information pertaining to groups, such as intelligence group (high, middle, low), self-concept group (high, middle, low), family group (well adjusted, average, broken home), extent-of-reading-avidness group, and social popularity group.

Aside from the fixed variables such as sex, grade, and handedness, there were 209 dependent variables or bits of numerical information about each subject.

The preceding section may have seemed tedious to the reader, but since the scoring procedures were not available in cited literature, alternate means of scoring needed to be established. The intent of such quantification of the data was to enable objective comparisons between individual avid readers and between groups of avid readers. In many cases weighted scores are obtained, which means that because an unequal number of items described different traits, then the numerical description of a trait was averaged appropriately based on the number of items representing it.

Some data was included in an analysis of variance, other data in a correlation procedure, while all data was summarized into means and standard deviations. The following section details more explicitly the statistical procedures and results.

II. FINDINGS AND RESULTS

A description of the pilot study sample, main study sample, and norming groups for the "Self-concept Cards" has already been presented in the previous chapter, as well as a summary of the achievement levels of the subjects. The reader is referred to Table 3.3 for an analysis of the achievement scores of the avid readers used in this research.

The following sections offer specific results pertaining to the areas assessed in this study.

A. Intelligence

The Wechsler Intelligence Scale for Children (WISC) (Wechsler, 1949), administered individually to all 36 subjects, provided an excellent indication of the range of intellectual abilities exhibited by the avid readers. The results are summarized in Table 4.1.

The asterisks in that table indicate which of the lowest and highest scores were obtained by left-handers. This may seem irrelevant here, but this very unusual discovery is explained at the conclusion of this chapter.

The differences between the mean verbal, performance, and full scale scores of the avid readers, compared to those of the national norms, are all significant (.01). There is no doubt that the avid readers as a group performed better on this intellectual assessment than would a group of peers chosen at random.

Of particular significance is their superior ability in similarities, vocabulary, and information (the average scaled score is 10, but the mean scaled scores of the avid readers were 13.91, 13.74, and 13.25 respectively). What is occurring is a growth of their word knowledge, word relationships, and general stock of information -- a likely result of their involvement and exposure to verbal concepts through reading.

The full scale score of the WISC for each student was compared to factor B (intelligence) of the CPQ, and to other group intelligence test results. The mean Pearson

TABLE 4.1

MEAN SCORES ON THE WISC

SUBTEST	LOW SCORE	HIGH SCORE	MEAN SCORE
Verbal IQ	79*	144*	114.92[1]
Performance IQ	90*	139	112.86[1]
Full scale IQ	85*	133*	115.28[1]
Information	6*	20*	13.25[2]
Comprehension	3*	17*	11.17[2]
Arithmetic	5*	16*	11.58[2]
Similarities	9	19	13.91[2]
Vocabulary	7*	20	13.74[2]
Digit span	5	17*	11.15[2]
Picture completion	5*	15*	10.70[2]
Picture arrangement	5	19	12.63[2]
Block design	7*	19	12.32[2]
Object assembly	6	17*	12.03[2]
Coding	5	20	11.45[2]

* indicates that this score was obtained by a left-handed subject

[1] the average score is 100.0 for the norm group

[2] the average score is 10.0 for the norm group

product-moment correlations were 0.520 and 0.678 respectively, indicating a good degree of consistency in the various forms of intellectual assessment used in the study.

B. Creativity

The Torrance Tests of Creativity (Torrance, 1966) assessed the creative abilities of the avid readers used in this project. Their scores, along with those of comparable grades reported by Torrance in his norms are presented in Table 4.2.

Throughout the seven subtests across all three grades, there were 13 subtests whose means were significantly (.05) different than those reported by Torrance. In three of those subtests (Figural originality) the mean for the avid readers was greater than for the norm means, while in the other eight differences the reverse was true.

In all subtests the variance of scores for the avid readers was greater than that for the students used in the norms. While it would appear that avid readers are generally not as creative as their classmates, part of this difference may be explained by the inconsistency with which Torrance suggested the tests be administered and scored. For example, the directions to the students in the activities partly state, "Try to . . . tell . . . a story . . . by adding to and building on your first idea." Then, in scoring these subtests, a student is penalized for repetitious ideas (which contradicts the instructions!). Several students who cleverly tied one theme throughout their expressions subsequently received a much lower score than what they should have.

TABLE 4.2

MEAN SCORES ON THE TORRANCE TESTS OF CREATIVITY FOR GRADES TWO, FOUR, AND SIX OF THE AVID READERS; PLUS THE RESPECTIVE MEAN SCORES FOR TORRANCE'S NORMS

SUBTEST	MEAN SCORE OF AVID READERS IN GRADE TWO	MEAN SCORE FOR GRADE TWO -- TORRANCE'S NORMS	MEAN SCORE OF AVID READERS IN GRADE FOUR	MEAN SCORE FOR GRADE FOUR -- TORRANCE'S NORMS	MEAN SCORE OF AVID READERS IN GRADE SIX	MEAN SCORE FOR GRADE SIX -- TORRANCE'S NORMS
Verbal fluency	34.18	36.7	55.00*	68.7	62.75	61.2
Verbal flexibility	17.73	18.7	28.00	29.4	31.08	27.3
Verbal originality	9.73**	15.9	25.67*	32.3	29.33**	44.3
Figural fluency	17.60*	20.3	17.30**	28.0	19.70	22.7
Figural flexibility	13.30*	15.4	13.40**	19.4	14.00**	16.6
Figural originality	29.30**	17.7	33.50**	24.1	39.30**	19.1
Figural elaboration	36.90	40.6	52.20**	66.2	89.80	72.6

* significant at the .05 level

** significant at the .01 level

Nevertheless, it would still seem that avid readers, on the whole, are not particularly creative according to the Torrance Tests of Creativity.

C. Achievement Motivation

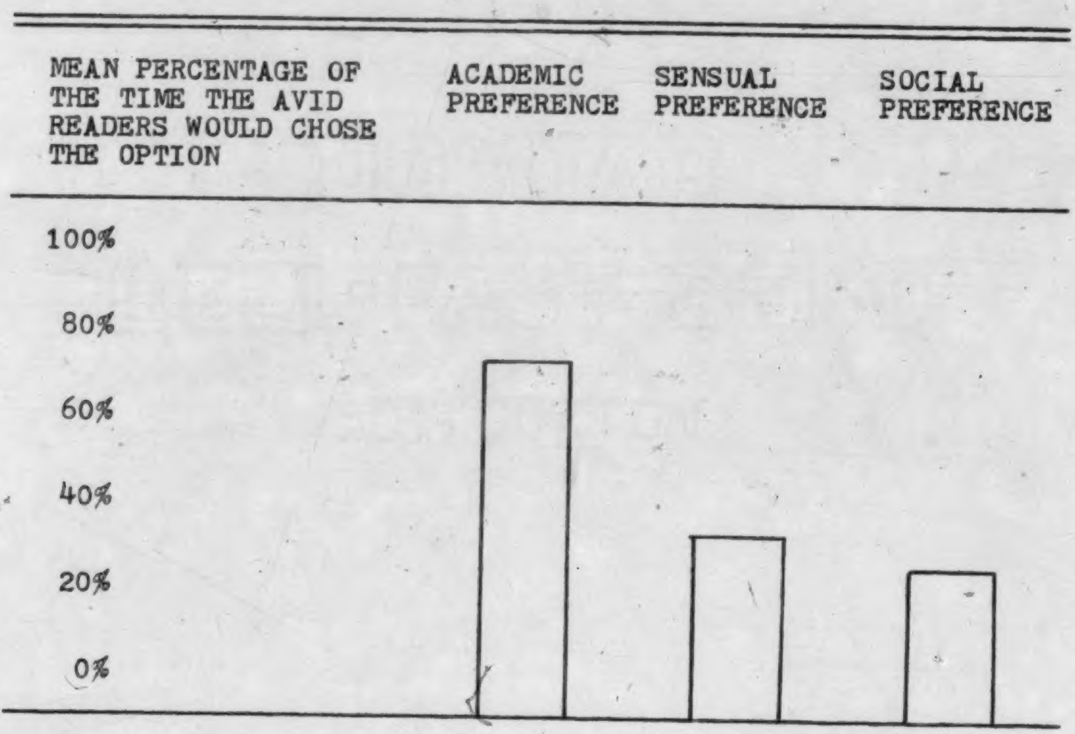
As described earlier, avid readers are usually good achievers, particularly in reading. That avid readers also express a strong desire to do well in general school achievement is shown by the following results.

In "What I Would Like to do Best" (Appendix E_1), the area of academic prowess could have been chosen as a preference in 16 items; social activities could have been chosen a total of 12 times, and sensual gratification could have been chosen 4 times. As was anticipated, the academic alternative was chosen an average of 11.32 times (70.75%), which was twice as frequently as sensual goals (mean of 1.30, or 32.5%) and social activities (mean of 3.37, or 28.1%). In other words, the avid readers were at least twice as prone to select academic activities over the other two desirable options, indicating a fairly high motivation toward scholastic achievement (see Figure 4.1).

The School Motivation Analysis Test, SMAT, (Appendix E_2) (Sweney and Cattell, 1966) was used to seek the predisposition of the avid readers toward 15 factors. By averaging the weighting of responses in each factor, one could arrive at an index of the relative desirability of that factor in comparison to other factors. These results are presented in Table 4.3.

FIGURE 4.1

PREFERENCES OF AVID READERS IN CHOSING ONE OF THREE AREAS PRESENTED BY "WHAT I WOULD LIKE TO DO BEST" (APPENDIX E_1)



Contrary to the results of the previous motivation questionnaire, the SMAT shows the gregarious (social) motivation of the avid readers to be of greater desirability than the learning (school ability) motivation factor. The scores however, are very close, and their difference is likely not statistically significant. Because each of these factors had a different number of items composing the total score, and thus had means and variances based on a different number of items, no "t" test could be applied.

TABLE 4.3

MEAN WEIGHTED RESPONSE SCORES ON THE SMAT

FACTOR	MEAN WEIGHTED RESPONSE SCORE (MAXIMUM SCORE: 5 MINIMUM SCORE: 2 AVERAGE SCORE: 3.5)
Protective erg	4.36
Dependency erg	4.34
Aesthetic erg	4.29
Gregarious erg	4.24
School ability erg	4.22
Narcissism erg	4.21
Aggression erg	4.14
Independency erg	4.14
Growth erg	4.12
Acquisition erg	4.10
Sensuous erg	4.07
Curiosity erg	4.05
Humor erg	3.80
Play fantasy erg	3.76
Sex erg	3.54

Avid readers express more desire to be dependent than to be independent, yet show the greatest desire toward some form of protection. A close examination of the types of questions included in each factor suggests one reason why the validity of the SMAT is limited. For example, question 11, "I want to show my father how great and admirable he is" is included in the dependency erg. But one could also argue that a student who responded with "very much" to this item could be motivated toward parental obedience, or affection, or security, to name a few. Thus, the factors are not wholly inclusive, and items which Sweney and Cattell claim to load under a particular erg may in fact load under another erg for the cases of the avid readers, who, being an atypical representation of a normal group, may be predispositioned in atypical ways.

It is somewhat evident that non-academic factors of sex, play fantasy, and humor are relatively unimportant to avid readers, while cognitive factors of learning, aesthetics, and security are relatively important.

D. Personality Traits

Self-concept assessment. As described earlier, the major test of self-concept was the "Self-concept Cards" (Appendix A_9), an amalgamation of several sources. This test was given to three classes, and the results are presented in Table 4.4.

An analysis of variance suggested no significant (.05) differences between grades and sexes on any of the factors of this self-concept scale. Thus, for comparative purposes, the total means and variances were used in deriving the results pertaining to the comparisons of the means that the avid readers attained to the means of the norming group.

TABLE 4.4

MEAN SCORES ON THE "SELF-CONCEPT CARDS" QUESTIONNAIRE (FOR THREE CLASSROOMS); AND MEAN SCORES, STANDARD DEVIATIONS, AND Z-SCORES ON THE "SELF-CONCEPT CARDS" FOR THE AVID READERS

CATEGORY	GRADE 2 CLASS		GRADE 4 CLASS		GRADE 6 CLASS		MEAN FOR NORM GROUP	MEAN FOR AVID GROUP	S. D. FOR NORM GROUP	S. D. FOR AVID GROUP	Z-SCORE
	FEMALES	MALES	FEMALES	MALES	FEMALES	MALES					
Behavior	54.5	55.4	55.0	53.9	53.9	54.7	54.5	57.9	7.2	6.9	2.23**
School	93.3	97.6	96.5	93.7	92.8	86.5	93.2	107.8	14.0	12.1	5.30**
Family	67.5	68.5	71.0	70.5	70.1	69.8	69.7	74.3	9.4	7.6	2.60**
Popularity	63.3	64.3	68.8	64.7	61.9	62.2	64.1	69.3	9.8	10.4	2.33**
Physical	51.3	48.3	54.1	48.8	52.1	52.5	51.0	55.1	7.8	6.5	2.73**
Calmness	120.3	115.9	116.4	116.2	120.9	124.2	118.9	136.2	22.3	23.5	3.43**
Happiness	230.5	235.6	239.9	237.0	232.4	234.1	235.0	255.1	27.1	26.2	3.49**
TOTAL	680.5	685.5	701.1	684.6	684.1	684.0	686.4	755.6	80.0	80.8	3.93**

** significant at the .01 level

The means and standard deviations of the avid readers on the "Self-concept Cards" were compared to those of the three classrooms constituting the norming group. These results are also shown in Table 4.4 along with the z-scores.

It can be readily seen that in all of the areas of self-concept the avid readers as a group showed significantly (.01) more adjustment than did their peers. This is particularly evident in the attitude that avid readers had about school and school-related areas.

Each of the eight categories contained a different number of items. For example, there were 15 items describing some aspect of behavior, whereas there were 27 items describing school-related activities. If the mean score per item in each category were calculated by dividing the total mean score of the category by the number of items it contained, then one could obtain an indication of the relative adjustment in each category. To illustrate this, consider the category of "behavior". The avid readers scored a mean of 57.9, based on 15 items. Therefore, each item had a mean of 3.86. If similar means were calculated for the other categories then comparisons could be made to derive the relative adjustment that the avid readers had in each area. These "item-means" are presented in Table 4.5.

It would appear that the area that the avid readers felt most adjusted in was school, with the family the next most adjusted area. On the other hand, avid readers would

TABLE 4.5

ITEM-MEANS FOR THE SELF-CONCEPT CATEGORIES OF THE AVID READERS AND FOR THE CLASSROOM NORMING GROUPS

CATEGORY	MEAN FOR EACH ITEM FOR THE AVID READERS	MEAN FOR EACH ITEM FOR THE NORMING GROUP (MAXIMUM SCORE: 5 MINIMUM SCORE: 1)
School	3.87	3.45
Family	3.85	3.66
Behavior	3.81	3.63
Happiness	3.79	3.56
Physical status	3.67	3.40
Calmness	3.56	3.13
Popularity	3.42	3.21
Mean score	3.72	3.43

seem to show the least adjustment in the area of popularity, or in peer relationships. The "mean-item" scores for each category of the "Self-concept Cards" of the avid readers were compared to the mean scores of the classroom norming groups.

The most noticeable change is the relative status of "school", which was fourth on the list of adjustment for the classroom groups, as compared with first on the list for the avid reader group. One could assume that the avid readers, on the whole, had a healthier attitude toward school than did their classmates.

Anxiety. As alluded to in the previous section, the avid readers showed significantly (.01) less anxiety than did their peers, despite the relatively poor showing that calmness had in the self-concept categories.

In terms of test anxiety, on the "Modified Test Anxiety Scale for Children" (Appendix B_3) the male avid readers had a mean of 4.67 items per 30 items that indicated some degree of anxiety about test situations, while the female avid readers averaged 6.61 items indicating anxiety. Sarason et al (1960, p. 156) reported mean scores of about 6.5 for males and 7.5 for females in his American sample of children in grades one to four. It would appear that avid readers as a group showed less test anxiety than the children used in Sarason's et al study, but it is not certain whether this difference is significant, as Sarason et al presented their results in terms of correlation coefficients.

Standardized personality tests. The CPQ (Appendix C_1) by Porter et al (1965) described the subjects' character traits in 14 areas. The mean score that the avid readers displayed in each of these traits is illustrated by profile in the following table, Table 4.6.

The four most dominant personality characteristics of avid readers as indicated by the CPQ were: higher mental capacity and abstract thinking, greater emotional stability, more self-assuredness and serenity, and greater spontaneity and social boldness.

TABLE 4.6

CPQ (PORTER ET AL. 1965) -- TEST PROFILE (MEAN STANINE SCORES) FOR AVID READERS

A STANINE OF	1	2	3	4	5	6	7	8	9	10		
REPRESENTS	2.3%	4.4%	9.2%	15.0%	19.1%	19.1%	15.0%	9.2%	4.4%	2.3%	OF THE POPULATION	MEAN STANINE SCORE

A	Reserved	Outgoing	6.00
B	Less intelligent	More intelligent	7.37
C	Emotionally unstable	Emotionally stable	7.14
D	Inactive	Impatient	4.70
E	Submissive	Aggressive	5.44
F	Serious	Happy-go-lucky	5.06
G	Disregards rules	Conscientious	6.39
H	Restrained	Uninhibited	6.83
I	Self-reliant	Dependent	5.57
J	Follows the group	Individualistic	4.62
N	Sentimental	Calculating, shrewd	4.88
O	Serene	Troubled	3.88

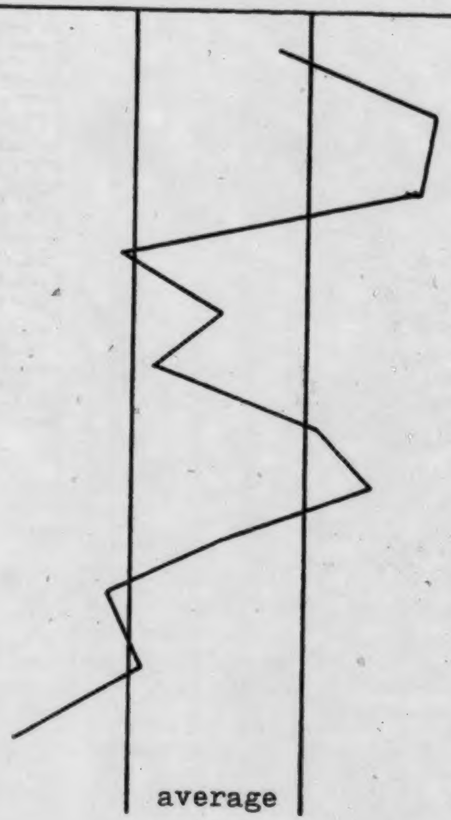
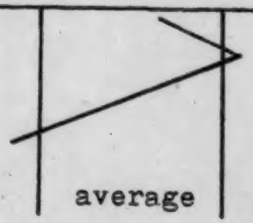


TABLE 4.6 (continued)

A STANINE OF	1	2	3	4	5	6	7	8	9	10		MEAN STA-NINE SCORE
REPRESENTS	2.3%	4.4%	9.2%	15.0%	19.1%	19.1%	15.0%	9.2%	4.4%	2.3%	OF THE POPULATION	
Q_3 Casual, untidy											Controlled, compulsive	6.43
Q_4 Relaxed											Tense	4.53



(the line represents the mean profile of the avid readers)

The scores of the CTP (Appendix C_2) (Thorpe et al, 1953) were computed in percentiles, and therefore means could not be calculated. However, the following observations were made: the personal adjustment scores were usually higher than the social adjustment scores: the sense of personal worth was by far the greatest area of adjustment, followed by self-reliance (independence), withdrawing tendencies (" . . . substitutes the joys of a fantasy world for actual successes in real life." Ibid., p. 3), and nervous symptoms. The area showing the least adjustment was in sociable behavior (indicating that avid readers would tend to be forthright, aggressive, and somewhat assertive).

In the areas of school and family relations, the avid readers did not score particularly well as a whole, although there were some avid readers who scored at the 95th percentile in these areas. Two reasons for the lack of a better showing of school and family relations might be in the outdated norms and relevant items for the test, as well as the tendency for one item to make a great difference (sometimes as much as 20 percentile points) in the percentile ratings.

Attitudes toward reading activity. The questionnaire which attempted to disclose the students' reading attitudes, "Attitudes Toward Reading" (Appendix D_1)

contained 38 items. Rather than detail the number and types of responses for each question, a summary of the results is offered below.

Twelve girls (out of 18) and 13 boys (out of 18), when asked what they liked to do best at home, responded with "reading" as one of their three responses. Other popular types of activities included: sports, watching TV, and playing with friends (for the boys); and playing with animals, baking, listening to (or playing) music, and playing dolls (for the girls). Of the 25 children who said that reading was one of their favorite home pastimes, 16 said that reading was the most favorite pastime.

At least two conclusions can be drawn. First, avidness in reading seems at times to be limited to seasons, special situations, different locales, different periods of time, and so forth (rather than being an all-pervasive avidness in reading). Thus, those children who did not indicate that reading was their favorite home pastime responded that it was one of their favorite school pastimes; illustrating that their avidness in reading was confined to school, and not extended to the home. This was so in five cases out of 11. The remaining six students who did not list reading as neither a favorite home nor school activity were all very athletic and appeared to do well in all of their school as well as extracurricular activities.

Second, avid readers were not always the familiar "bookworms" -- confined indoors, consuming vast quantities of books, and having no interests in non-reading activities; but rather, many avid readers seemed to engage in other activities typical for their age and sex.

When posed the question, "What does reading mean to you?" the avid readers responded with some expected as well as some unusual answers. Many focused on the entertainment value of reading: "it's fun", "to relax", "it's a pleasure to be able to read". Others stressed the informative nature of reading: "you learn about things", "I understand the world better", "finding out about people", "doing work in school". Many avid readers mentioned both areas.

Some very insightful responses were also given: "to learn library skills", "there's nothing else to do", "it means friends -- books are your friends", "when my dad drinks -- I read -- it calms me down", "calms me down if I'm mad".

Similar answers were given to the question, "Why do you like to read books?" Indeed, if the true answers to this question were easily obtainable, this thesis would be very meager. Responses to this question often strikingly reflected the depth of children's perceptions. "I am lonely when I go to read -- reading cheers me up -- makes me happy" -- a grade two boy of divorced parents). "You can't learn unless you read" (a grade two girl of very high achievement). "It makes me feel like one of the people in the book" (a grade six girl of extreme classroom alienation and unpopularity). "To get relaxed -- it calms me down" (a grade six boy of parental alcoholism and hostility). "It makes you feel suspense" (a shy, timid, very well-behaved grade four girl). "It's the best thing I can think of to do with myself -- I'm in a different world of my own when I read a book -- I get going and I don't want to stop" (a grade four rural boy with no TV set in the house). Surprisingly, 12 students responded with the notion that there was nothing else to do -- as if reading were a last resort. This would raise the possibility that avid readers find reading intrinsically more rewarding than watching TV, or sports, or perhaps even socializing with friends.

The list of reading materials submitted by the students, in addition to their comments about what they read, ranged over several areas: animal, mystery, sports, informative and other types of popular books commensurate with their ages.

In terms of how many books the students said the family had at home, estimates ranged from 12 books to 1500 books, with the mean being 185 books (the parents' estimates averaged 270 books). The avid readers guessed that they had an average of almost 70 books and magazines of their own. Some had as few as only two books, and others had as many as 300 books and magazines.

School libraries were a more popular source of books than community libraries. On the average the community library was visited almost twice a month, while the school library was visited about 4.5 times a month. The proximity of the school library plus planned library classes would certainly account for this difference.

When the subjects were asked to recall how much they thought someone (mother, father, grandparents, older siblings, babysitter) had read to them before they started school, most responded with about 10 to 15 minutes per night, averaging 106 minutes per week. A very few number of students responded with less than 20 minutes per week, while some students felt that including the times that someone read to them during the day as well as bedtime reading, they would have been read to almost 2 hours daily. Even though this latter estimate seems unlikely at first glance, there were parents who verified this amount of reading, relating how the mother would often take time from her housework to read to her child during the day. Furthermore, in some cases there were several family members who contributed in reading to the child.

Whereas the avid readers estimated that they were read to for a mean of 106 minutes (1.7 hours) weekly, the parents' mean estimates of this reading time were somewhat higher -- 143 minutes (2.4 hours) weekly. By the time the child was in grade one, the amount of time he was read to decreased by half -- to 72 minutes weekly, and then gradually reduced. There were cases where even some children in grade six were still read to occasionally. This was so when the mother read an interesting newspaper article, or a short excerpt from the Readers Digest, for example. This information is summarized in Table 4.7.

When asked how much they thought their mothers read to themselves, the guesses of the avid readers ranged from 10 minutes to 1890 minutes (31.5 hours) weekly, with the mean being 276 minutes (4.6 hours) weekly. Mothers tended to see themselves as reading considerably more than what their children had estimated. Their estimates ranged from 30 minutes weekly to 1700 minutes (28.3 hours) weekly, with the mean being 464 minutes (7.75 hours) weekly (see Table 4.7).

Avid readers tended to see their fathers as reading the same amount as the mothers -- the mean estimate was 273 minutes per week. It would appear that even though the children would likely see their fathers much less than their mothers during the day, fathers would be visible in reading in the evening. The fathers' estimates of their own reading time per week averaged 393 minutes (6.6 hours).

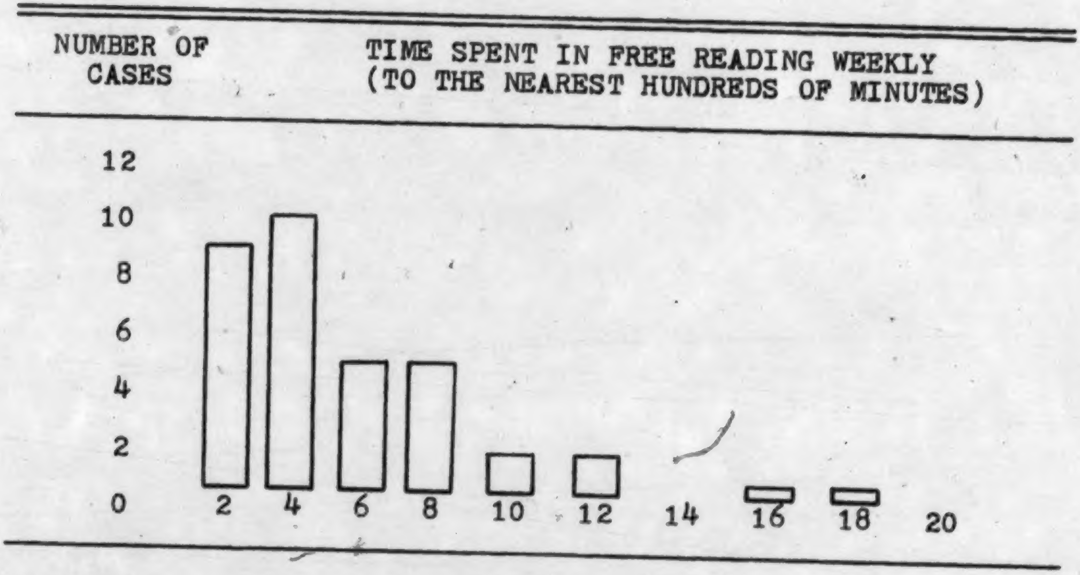
Avid readers tended to see themselves as reading an average of 640 minutes per week (or 1.5 hours daily) at home. This was their estimate based on whichever season of the year they felt that they read most. Some students said that they read most during the summer holidays when they had plenty of time; while other students claimed that they read more in the winter when there was little else to do.

Their estimations ranged from a low of 140 minutes (2.3 hours) weekly to a high of 2100 minutes (35.0 hours), while the mean was 638.44 minutes (10.6 hours) weekly. In comparison, the parents' guesses of how much they thought their children read weekly were slightly lower, averaging 540 minutes (9.0 hours) per week.

The following figure presents a frequency distribution of the average of the combined mean parental and mean self estimates of how much the avid reader spent in free reading in one week.

FIGURE 4.2

COMBINED MEAN PARENTAL AND MEAN SELF ESTIMATES OF TIME SPENT IN FREE READING WEEKLY FOR SUBJECTS



What is most obvious is the great range of time spent per week in free reading. The least time estimated was comparable to one-half hour daily, in comparison to the most time spent, estimated at 4 hours daily. In fact, several mothers expressed concern that their children were reading too much daily during the summer vacation, and some parents even acknowledged difficulty in getting their children to do household chores because of their reading veracity.

One form of statistical analysis was a one-way analysis of variance which compared three groups which differed in time spent in free reading weekly on several variables. These groups were divided according to the following criteria. The students in the high-avidness reading group (N=13) were those students who averaged more than 600 minutes per week reading; the students in the mid-avidness reading group (N=13) averaged from 325 to 600 minutes per week reading; while the students in the low-avidness reading group (N=10) averaged fewer than 325 minutes per week reading. The manner in which the avidness groups were selected is discussed here in reference to Figure 4.2 (frequency distribution), while the extent that these groups differed is presented later in this chapter.

During free time at school, the avid readers perceived themselves as reading about 150 minutes weekly (30 minutes daily) on the average. This estimate varied with the grade -- grade two students did not read as much in school as the grade six students.

Table 4.7 summarizes the previous results on the parents' and students' estimations of the time spent per week in free reading at home, as well as the estimated times of how many minutes weekly someone spent reading to the subject.

TABLE 4.7

PARENTS' AND SUBJECTS' MEAN ESTIMATIONS OF TIME SPENT WEEKLY IN FREE READING AND TIME SPENT READING TO THE SUBJECT

	MEAN SUBJECTS' ESTIMATIONS	MEAN PARENTS' ESTIMATIONS
Mother's weekly reading time	276 minutes (4.6 hours)	464 minutes (7.7 hours)
Father's weekly reading time	273 minutes (4.6 hours)	393 minutes (6.6 hours)
Subject's weekly reading time	638 minutes (10.7 hours)	540 minutes (9.0 hours)
Amount of time that others spent weekly in reading to the subject in preschool	106 minutes (1.7 hours)	143 minutes (2.4 hours)

The correlation coefficient between the parents' estimates and the child's self estimates of the amount of weekly reading activity of the subject was relatively low (r=0.248) and non-significant (.05). One could reasonably infer that estimating the time spent at some activity is not an easy task to do, as demonstrated by the differences in the parents' versus the children's guesses. The younger children, too, would likely have difficulty in judging lengths of time.

It is interesting to note that children saw themselves as reading more than their parents thought the children read;

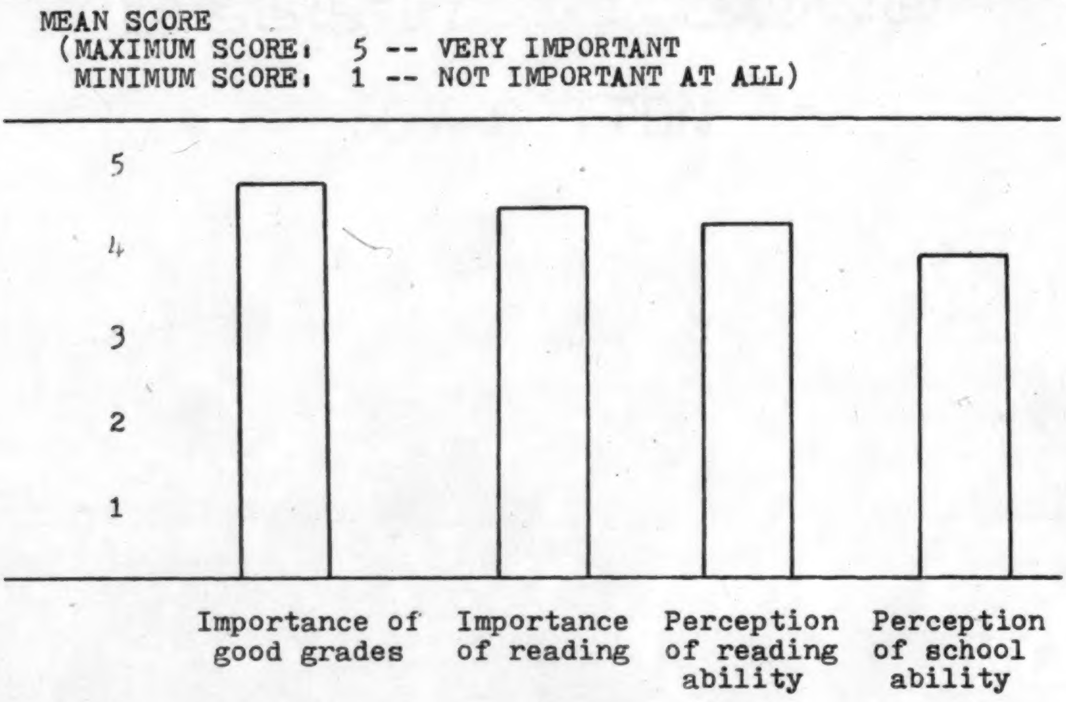
and similarly, the parents saw themselves as reading more than the children thought their parents were reading. It would seem that there is an exaggeration here of one's abilities, i.e., the Hawthorne Effect. It is not uncommon for people to put themselves in a "good light". What is implied is that if this tendency to see one's self positively is extended to all the other self-evaluation instruments used in the study, then results may be spuriously high. This danger was partially safeguarded by the inclusion of other witness' judgements and observations, by more than just one assessment of any trait (three indexes of intelligence, for example), and by an in-depth, comprehensive case study approach.

These avid readers generally perceived their parents as being good readers and as wanting them to read books. With the exception of two students, all the avid readers thought that good grades in school were "very important" (mean score of 4.94). Of less importance, but still showing achievement motivation, was their attitude toward how important reading was to them (mean score of 4.45). Most of the avid readers tended to see themselves as being better in reading (mean score of 4.27) than in general school work (mean of 3.96) compared with their classmates (see Figure 4.3).

When asked how many books and magazines they felt they read as compared with their friends, most (N=14) replied "many more". Twelve students responded with "a few more", 9 students with "as many as they do", and one mixed up

FIGURE 4.3

MEAN SCORES OF SUBJECTS ON QUESTIONS OF READING ATTITUDE



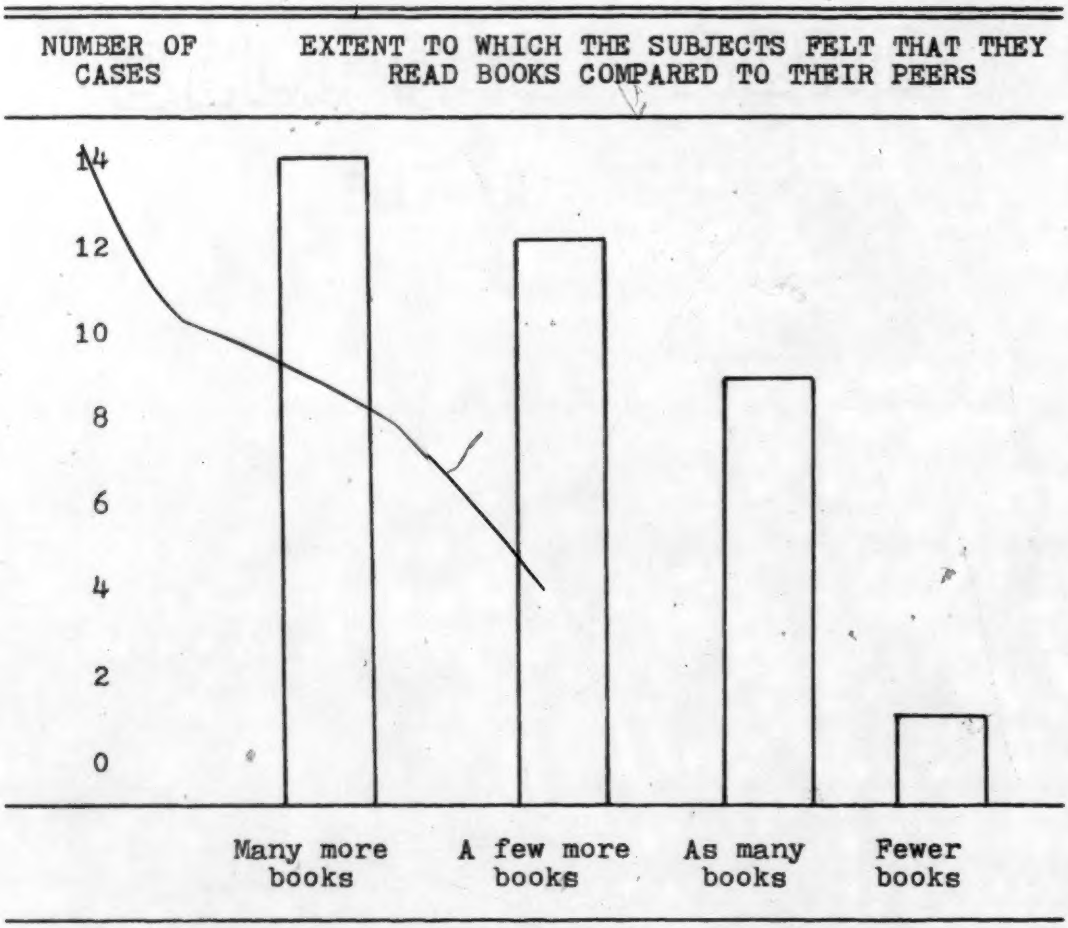
fellow with "fewer than they do" (see Figure 4.4). In general the avid readers do distinguish themselves as being more avid in reading activity than their peers.

E. Behavioral Observations

Some behavioral descriptions of avid readers with reference to the amount of time spent in free reading have already been discussed in a previous section on attitudes. This section refers to the observations and judgements that other people have about the avid readers used in this study.

FIGURE 4.4

SUBJECTS' PERCEPTIONS OF THEMSELVES AS AVID READERS



Teacher source. The "Teacher's Evaluation of Student's Behavior" (Appendix F_1) asked the teacher to rate the personal adjustment of the subject in five areas. The two areas which eventually showed the greatest degree of adjustment were in achievement (mean score of 4.17 -- a maximum score of 5 was for good adjustment, and a minimum score of 1 was for poor adjustment) and lack of aggression (mean score of 4.15). Overall adjustment (mean score of 3.92), maturity (mean of 3.72), and emotionality (mean of 3.61) were the other three areas assessed. Although it would appear that the avid readers as a group were evaluated as well-adjusted by the teachers, there were individual cases of poor adjustment.

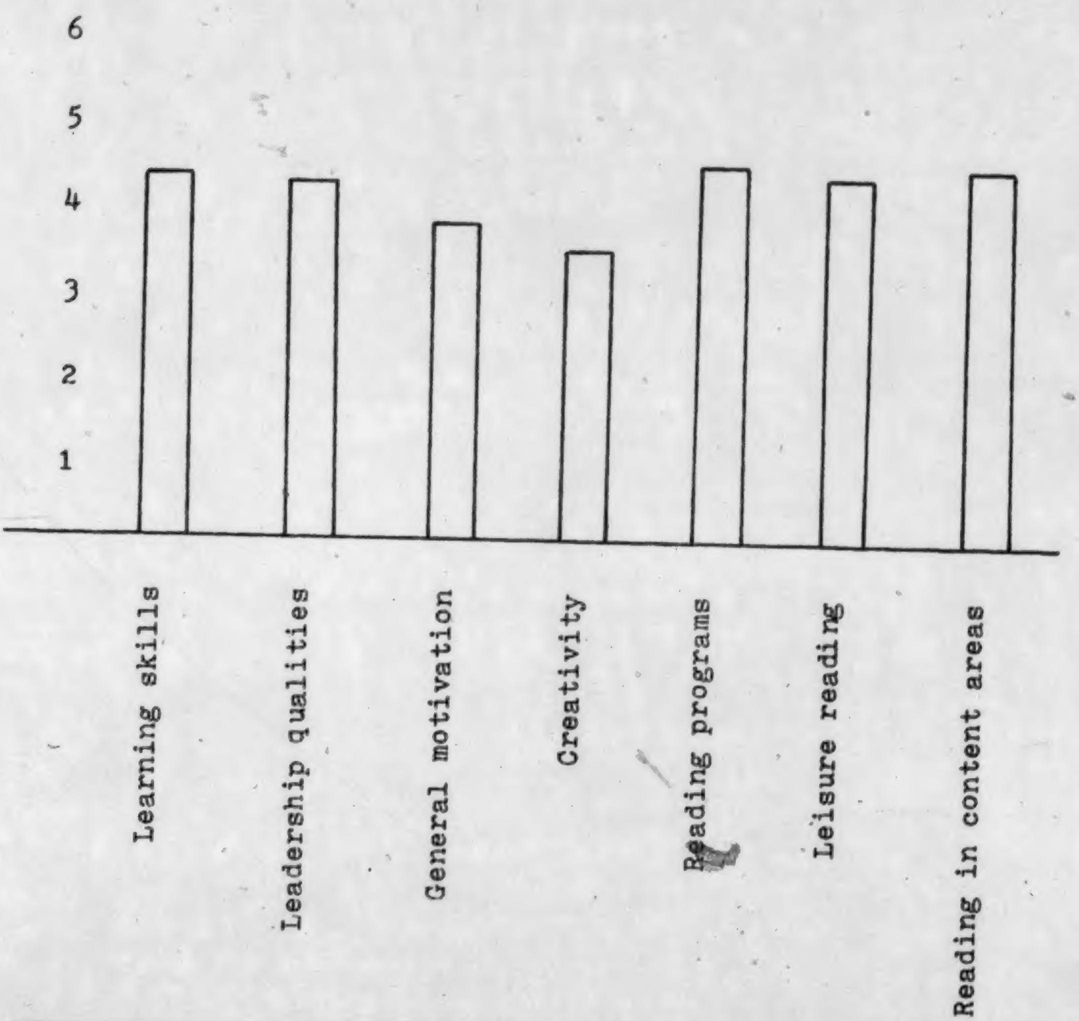
The "Teacher Interview" (Appendix F_4) used by Renzulli et al (1971) in identifying superior students, proved to be effective in further delineating characteristics of avid readers. The trait which received the highest rating was that of learning (mean score of 4.32 -- a maximum score of 6 represented traits possessed "absolutely all the time", and a minimum score of 1 represented traits "never" possessed), with leadership qualities following closely (mean score of 4.30). These scores would be comparable to verbal descriptions equivalent to more frequently than "to a considerable degree" but less frequently than "almost all the time". General motivational qualities rated third (mean score of 3.93) while creativity traits received the least rating (mean of 3.59). These results once again support the tendency for avid readers to be competent achievers, as well as displaying good adjustment in terms of personality development and social relations.

The results of Rowell's (1972) attitude scale toward reading activities were also very encouraging. Here the teachers were inclined to see the avid readers as being keenly interested in the areas of the classroom reading programs, leisure reading, and reading in the content areas (means of 4.48, 4.34, and 4.37 respectively). See Figure 4.5 for a summary of these results.

FIGURE 4.5

PREVALENCE OF LEARNING TRAITS AND READING BEHAVIORS IN AVID READERS AS SEEN BY THEIR TEACHERS ON THE "TEACHER INTERVIEW" (APPENDIX F_4)

MEAN SCORE
(MAXIMUM SCORE: 6 -- ABSOLUTELY ALL OF THE TIME
MINIMUM SCORE: 1 -- NEVER)

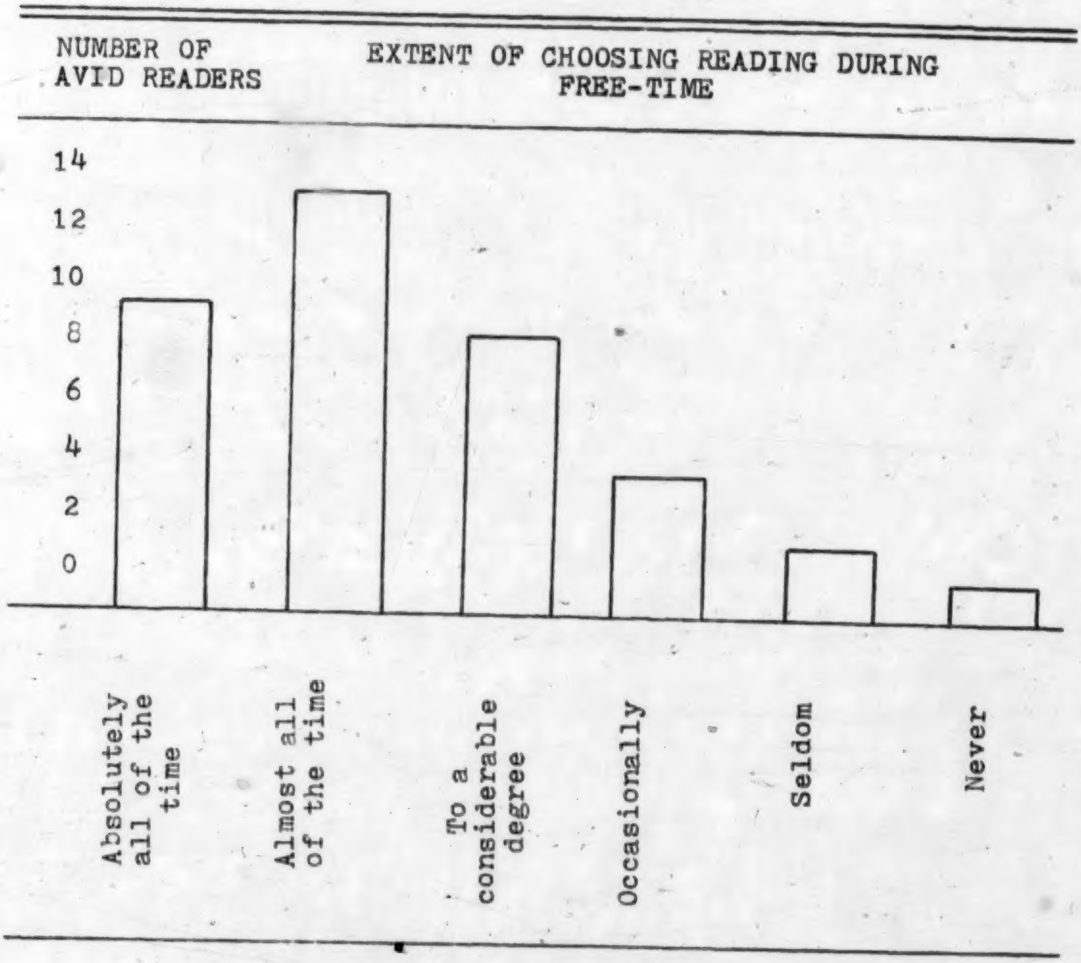


Responses to one of Rowell's questions were revealing. Item 8, "The student elects to read a book when the class has permission to choose a 'free-time' activity," had a total of 34 teachers responding to it. The distribution of responses was as follows: absolutely all of the time (9 responses, or 26.5%), almost all of the time (13 responses, 38.2%), to a considerable degree (8 responses, 23.5%), occasionally (3 responses, 8.9%), and seldom (1 response, 2.9%) (see Figure 4.6). The trend is toward the avid reader choosing to read in a great deal of "free-time" situations. This is not unusual, since the teachers initially chose the avid readers from their classrooms based upon the visibility of reading activity among their students.

The four responses in the infrequent categories were unexpected. It would seem reasonable that avid readers would choose to read more often than merely "occasionally", and certainly more often than "seldom". A review of the questionnaires of these four students suggested some clues concerning a logical explanation. The teacher who responded "seldom" to the question added a note that the student was difficult to evaluate because he was so withdrawn and shy. Consequently many items were left unanswered. The student happened to be transferred to a school with which this writer had close contact, and the new teacher was queried about the student's reading habits. He was not noted to be the most avid reader in this new class, but still remained fairly interested in reading, and pursued it often (but not

FIGURE 4.6

TEACHERS' PERCEPTIONS OF EXTENT TO WHICH SUBJECT CHOOSES TO READ IN "FREE-TIME" ACTIVITY



to the extent of being keen). Two possible resolutions to this inconsistency may be that the teacher misread the question, and thus her answer is invalid; or more likely (and this suspicion was gathered from several sources), the classroom atmosphere was so stifled that the student did resort to reading because it was one of the few activities that he was allowed to do.

The teachers who responded with "occasionally" to this item may have perceived "free-time" as meaning classroom time granted to the students to participate in a choice of activities, and these four students may not have regularly chosen to read then; but they may have chosen to read at other times such as at recess, lunch hour, after school, during gym, and perhaps even during regular classroom instruction when they should have been doing schoolwork.

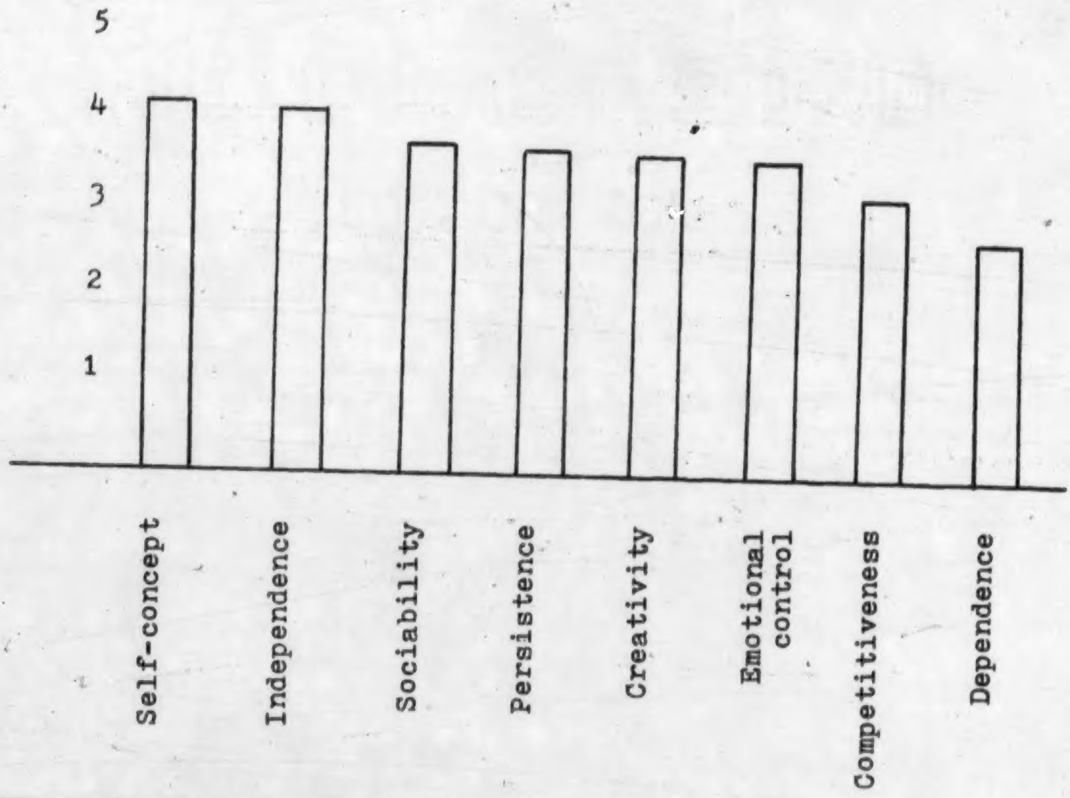
The "Teacher Questionnaire" (Appendix F_5) adapted after C. P. Smith (1969b) included eight areas upon which the avid readers were rated. Results indicated two areas of high predominance, four areas of mid-importance, and two of low importance. The avid readers' self-concepts and tendencies toward independence were rated quite favorably by the teachers (mean scores of 4.09 and 4.03 respectively -- a maximum score of 5 indicated a high occurrence of a trait, and a minimum score of 1 indicated a low occurrence of a trait). The traits rated as being somewhat predominant were: sociability (mean score of 3.70), persistance (3.66), creativity (3.63), and emotional control (3.52); and the two areas of relatively low occurrence were competitiveness (3.05) and dependence (2.64) (see Figure 4.7).

From Figure 4.7 it can be seen how competition rated poorly with avid readers, and it could be that by their very natures avid readers chose non-competitive activities -- as reading surely is a non-competitive, independent, solitary activity.

FIGURE 4.7

MEAN SCORES OF TEACHERS' PERCEPTIONS OF TRAITS EVIDENT IN AVID READERS

MEAN SCORE
(MAXIMUM SCORE: 5 -- HIGH OCCURRENCE OF TRAIT
MINIMUM SCORE: 1 -- LOW OCCURRENCE OF TRAIT



It would seem that a positive self-concept linked with mature, responsible behavior would be the outstanding characteristics of avid readers as indicated by this test instrument.

The numerical ratings that the teachers used in evaluating students were very useful, but their comments to the following question provided further refreshing insights: "What characterizes _________ beside the fact that he/she reads books? What other things about him/her make him/her outstanding?"

The resulting comments illustrate the diversity of thoughts given by teachers concerning the subjects: sensitive, uses the knowledge gained from her reading to apply to a solution in everyday life, his over self-confidence leads him deflated and so he will lose himself in a book, good sense of humor, extremely stubborn, cannot accept another point of view without an harassing argument, extremely mature, wonderful disposition, has a tendency to get (emotionally) hurt, verbally aggressive, spontaneous, can see the beauty in words, extremely artistic, a help to those requiring assistance, inquisitive, very kind, unable to cope with frustration, well-behaved, does not participate actively in a group.

Had all the teachers responded to this question the gamut of responses would have doubled. There are several themes throughout the nature of the teachers' comments. They would certainly be as much a reflection about the teacher as about the student, but they are worth noting.

Avid readers would seemingly be one of several types according to the information amassed about them to this point: (1) the academically and behaviorally well-endowed student who is mature, cooperative, and a good learner, i.e., the "bookworm", (2) the socially likable reader who is popular, pleasant, friendly, and usually athletic; who has many friends, and reading is an extension of a vibrantly outgoing person, i.e., the "star of the class", (3) the frustrated and often insecure student having some but few friends, poor peer relationships, who seeks consolation in books, but does not seem to shine in any area, i.e., the "misfit", and (4) the social isolate of often poor academic performance, with little (if any) friendships; almost invariably from an upset broken family, i.e., the "loner". Now these descriptions are not mutually exclusive nor exhaustive, but they do provide a crude framework upon which to view the critical role that the family plays in the development of a reading avidness attitude (any attitude for that matter) in children.

Parent source. Initially the parents of the avid readers of this study were used in order to gain further insight into behavioral patterns of the subjects. But as information came in, it became increasingly evident that the home atmosphere was assuming a more and more important role. Attitudes of parents about child-rearing, about discipline and education, and beliefs surrounding their particular children kept surfacing in the behavior of their children.

To cite two examples, consider the case of a grade two girl with a very high intelligence score, very popular peer ratings, and outstanding school records. Her father spent much time with her at breakfast, lunch hour, and frequently after school because of his midnight work shift. The time that he spent with his daughter apparently had a great deal to do with her success. The second example concerns a grade six boy who had repeated one grade, was doing very poorly in school again, and was relatively unpopular. His parents failed to keep their scheduled times for interviews, did not telephone to show their concern, and often were forgetful of when the boy was going to be tested. The boy missed two interview sessions, was late for a third, and practically slept through another. The harsh comments here regarding the student reflect the family situation, where this writer's frustration toward the lad must also have been felt by the boy toward his parents. Once again, parental patterns set the trend in the children.

Some of the information collected from the "Parent Interview" (Appendix G_1) is presented under the heading of "demographic data" later in this chapter. The following summary presents mostly the parental attitudes and philosophy of child-raising.

Of the 36 families involved in this study, interviews were held with 32. Interviews were not conducted with two families of the children used in the pilot study as the writer had lost contact with them. Of the other two families having no interview, one mother plainly refused to grant a meeting, while continued efforts to arrange a meeting with the other family were met with non-compliance. Thus, the following findings are based on 32 family interviews.

Eight students (of 32) did not attend any form of preschool prior to grade one. Without exception, all of these students were rural, where difficulties of transportation may have been encountered. There were, however, other rural children who did attend at least a three-afternoon per week kindergarten. Most of the remaining children did attend kindergarten, but some only attended playschool.

The avid readers felt "enthusiastic, eager, and excited" about school before starting. This was the way the parents remembered it. The term most often used to describe the preschooler's feelings about school was, "He/she was really ready for it." One child was described as non-committed, while two were seen as not wanting to go. One boy treated it as an intrusion into his playing in the outdoors, while the other boy began to really like it in grade two.

With one exception the attitudes of these children toward their grade one teachers were exceptionally positive; or, as the parents put it: "he would cry if he had to stay home", "he liked it even more", "terrific!" The one exception was a rural grade four boy who did not attend kindergarten, and who spent a good portion of his first year feeling awed, but he did manage to pick up quickly in his second year of school.

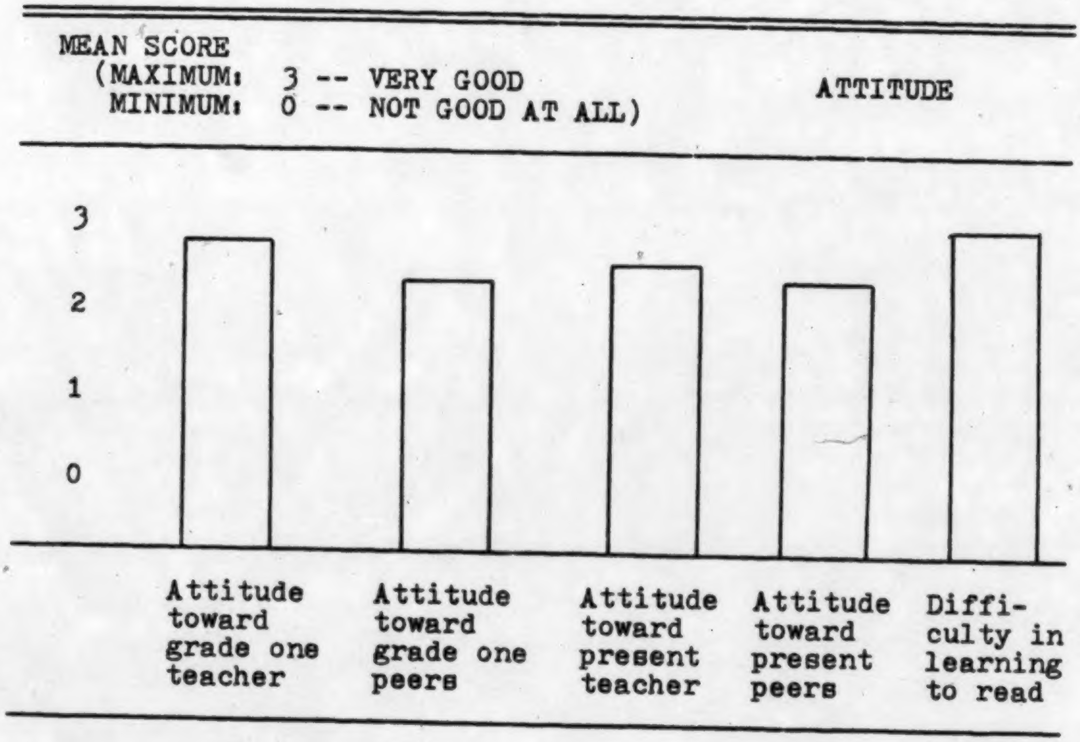
The mean score of attitudes toward the grade one teacher was 2.77 (a weight of 3 was given for an attitude of "very good", 2 for "good", 1 for "fair", and 0 for "not good at all"). The mean score of attitudes toward the grade one peers was slightly less, at 2.39. As the children advanced through the grades their enthusiasm toward the teacher lessened, while their general attitudes toward their classmates remained the same. The mean score of attitudes toward their present teachers was 2.46, while the mean score of attitudes toward their present classmates was essentially the same at 2.35 (see Figure 4.8) as the attitudes toward their grade one classmates.

The average number of outside-of-school activities that the avid readers participated in was almost 4 activities (mean number of activities was 3.97). There was only one avid reader who claimed to have had no extracurricular activities (the rural grade four boy previously mentioned). The three most popular areas of participation were: Sunday school (23 responses, or 72% of the students claimed to be involved in this activity), organized sports (20 responses, or 63%), and formal music training (15 responses, or 47%). Other activities included: 4-H club, Boy Cubs, crafts classes, and Brownies.

Parents and older siblings read to the avid readers when they were young -- some as little as 10 minutes weekly and others as much as 500 minutes (8.3 hours) weekly. This amount of time was roughly reduced to half by the time the

FIGURE 4.8

MEAN SCORES OF ATTITUDES OF AVID READERS TOWARD THE TEACHER, PEERS, AND LEARNING TO READ



child had entered grade one. Children from families classified as "broken", (i.e., one-parent families, or families with other obvious turmoil such as alcoholism) were read to an average of 56.3 minutes weekly. Children from families classified as "typical" were read to an average of 101.7 minutes weekly, while children from families described as very close and well-adjusted were read to an average of 200.2 minutes weekly.

With respect to the amount of difficulty their child had in learning to read, most parents replied with "no trouble at all", although six parents did reply with "some trouble". The mean response weight was 2.81 (a score of 3 was "very good") which was the area showing the greatest adjustment in the "Parent Interview" (see previous Figure 4.8).

Items 36, 37, 39, 47, 48, and 58 of the "Parent Interview" provided insight into the parents' philosophies of child-raising. These items reflected to what extent parents set limits and guidelines for their children, and to what degree they were involved with activities of their children. Most parents (N=26, or 81%) had set some type of rules regarding the length and type of TV the child was allowed to watch. Six families had no such rules.

When it came to parental rules regarding the reading of books, 19 parents (59%) had no rules set yet against the length of time that their child spent reading books. The 13 parents who did set rules had to establish them because their children were reading too much, not getting enough fresh air, and frequently reading until much past their bed time. Concerning the rules about the types of books their children read, 22 parents (69%) had no such rules, claiming that their children had wise choices of reading materials. The other 10 parents would have confiscated "skin" type books, or other material of an X-rated nature.

In the area of the extent to which these parents would allow their children to make their own decisions, 8 parents (25%) actually encouraged the child to make early responsible decisions, and they tried to interfere as little as possible into their children's decisions. The majority of parents, however, (N=23, or 72%) would allow for much decision-making, but they would interfere with some matters not directly harmful or injurious to the child; while one parent (3%) suppressed the child's decision-making activities.

The importance that the parents placed on the attainment of good grades reflected basically two attitudes. Ten parents (32%) saw good grades as very important -- a goal to be achieved amongst all others; while 22 parents (68%) saw good grades in a broader perspective -- a goal surely important, but not to the exclusion of happiness and a well-rounded personal growth. No parents stated that good grades were unimportant.

The parents' attitudes toward physical punishment and discipline in general were truly indicative of the importance that the parents placed upon them in their children's development. Only one parent denied the usefulness of physical punishment, saying other methods worked better. All other parents did use (and were using in some instances) some form of corporal punishment, usually spanking.

Virtually every parent without exception testified to the role that discipline played in their children's upbringing. Their concern for their children was shown by the numerous examples they cited in describing their disciplinary procedures. Neither were the parents too strict nor too lenient, but they seemed to have gained the respect of their children through at least the consistency of their disciplinary procedures tempered with the great care and attention afforded the children.

This attention was further exemplified in the number of outside-of-school activities the parents shared with their children (mean number of activities was 3.65). It was not unusual for parents to be involved as participants in every one of the five organized sports that their sons were engaged in; or for rural mothers to spend two to three hours weekly chauffering their children to events in town, or for whole families to spend weekend activities as a group (skiing, hiking, skating, visiting, and so forth).

From a subjective point of view, it was the family's cohesiveness as a unit that seemed to be the one most outstanding trait that would describe these avid readers. The next chapter expounds upon this idea further.

The mean number of books that the parents estimated they had was 270.63. There were no significant differences between each of the three avidness reading groups (high, moderate, and low) in the number of books that the family had at home. It could be said that avid readers are found in both environments -- from families of abundant book resources as well as from families of an impoverished book selection.

A second parental questionnaire, labelled "Parental Questionnaire" (Appendix G_2), attempted to assign some numerical description to the traits that the parents would identify as being both more prevalent and more desirable in their children. Table 4.8 below lists the mean scores on the traits of the first section of the questionnaire which would reflect the degree to which the parent felt the child possessed that trait (a maximum score of 5 represents a high frequency of a trait, and a minimum score of 1 represents a low frequency of a trait).

Parents tended to see in their own children what they wished to see, and thus Table 4.8 is as much a reflection about parents' attitudes as it is in describing the traits of children. Affection, ambition, and maturity are seen as predominant traits; while timidity, dependence, and emotional control are viewed as not characteristic of avid readers. This seems to fit the pattern described previously by the teachers' perceptions.

The second part of the questionnaire stressed the qualities that a parent would like to see their child possess. Hence, the results, presented in Table 4.9 would give some indication concerning the personality characteristics valued by parents.

The three most desirable traits represent virtues that most parents would extol -- generosity, happiness, and striving toward success. Also high in this list were the traits of being obedient and ambitious. It would seem likely that parents supporting these traits would also perpetuate them in their children, and this avid-reading

TABLE 4.8

MEAN SCORES FOR TRAITS PARENTS DEEMED THEIR CHILDREN POSSESSED

TRAIT	MEAN SCORE (Maximum 5: high frequency Minimum 1: low frequency)
Affectionate	5.00
Ambitious	4.86
Maturity	4.78
Generosity	4.63
Emotional	4.61
Sociable	4.49
Responsible	4.41
Adaptable	4.40
Optimistic	4.29
Self-satisfied	4.23
Sensuous	4.21
Active	4.03
Leader	4.00
Persistent	3.96
Planning	3.89
Relaxed	3.60
Neat	3.56
Introverted	3.06
Dependent	3.03
Rational (not easily upset)	2.45

TABLE 4.9

MEAN SCORES FOR TRAITS PARENTS DEEMED DESIRABLE IN THEIR CHILDREN

TRAIT	MEAN SCORE (MAXIMUM: 5 -- HIGHLY DESIRABLE MINIMUM: 1 -- NOT DESIRABLE)
Generosity	4.62
Self-satisfaction	4.54
Persistence	4.50
Obedience	4.28
Ability	4.23
Ambition	4.13
Independence	4.12
Curiosity	3.87
Sociability	3.83
Creativity	3.74
Responsibility	3.57
Emotional control	3.55
Competitive	3.45
Leadership qualities	2.85
Activity	2.61

group of children would probably demonstrate a caring for others (manifested by their popularity), a positive self-concept (already shown), and ambition (by their motivation to read).

The "Mother's Questionnaire" (Appendix G_3) attempted to reveal the mothers' attitudes toward various facets of raising children. This was done by assessing the mothers' opinions in 15 areas, described in Table 4.10.

TABLE 4.10

MEAN SCORES ON THE "MOTHER'S QUESTIONNAIRE" ON FACETS OF RAISING CHILDREN

TRAIT	MEAN SCORE (MAXIMUM: 4 -- AGREEMENT MINIMUM: 1 -- DISAPPROVAL)
Comradeship and sharing	3.61
Encouraging verbalization	3.46
Feeling irritable	2.88
Equalitarianism	2.68
Approving the child's activity	2.63
Accelaration of reading	2.52
Being strict	2.42
Excluding outside influences	2.38
Dependency of child-raising role on mother	2.36
Rejection of homemaking role	2.32
Intruding into child's private affairs	2.22
Breaking the child's will	2.09
Acceleration of development	1.90
Fostering dependency of child on mother	1.71
Avoidance of communication	1.70

Once again, the importance that the parents placed on the humanistic traits of sharing is seen by the agreement they showed to activities involving generosity and comradeship. The mothers of avid readers tended to facilitate rather than deny the verbalizations of their children. The mothers tended to treat their children democratically rather than autocratically; approvingly rather than disapprovingly; acceptingly rather than rejectingly; and fostering a positive relationship rather than thwarting it.

Peer source. The sociogram was the means by which the peers of the avid readers contributed their ideas to the building of a picture of reading avidness.

Avid readers were chosen as "best friends" of a classmate on the average of 1.5 times per class. Some avid readers were not chosen as a "best friend" by anyone in the classroom (suggesting no really close personal ties), while other avid readers were chosen as "best friend" by as many as seven peers (suggesting a host of close personal relationships).

Some avid readers were ranked as the number one most popular student in the class, but this was rare (only two cases). Other avid readers were ranked near the bottom of the popularity list, and one avid reader was the most unpopular student in the class. The mean rank for popularity was 12.29, indicating that avid readers usually assumed an average popularity position in the eyes of the class. The degrees of popularity of the avid readers were quite noticeable, and these implications are discussed later.

Avid readers did not fair well when their peers were asked to state who they thought were the students in the class reading the most books. The mean rank was 5.93; in other words, avid readers were usually recognized as reading many books, but they only rated about sixth in an average class of about 30 students.

This would suggest that the children of the class would recognize outstanding students of athletic or academic ability, but when it comes to public recognition for self-indulged noncompetitive activities, such as reading at great lengths, avid readers were usually overlooked. The impression one gains is that avid readers were a rather unostentatious lot in terms of classroom popularity.

F. Demographic Data

Some preliminary data concerning the basic constitution of the sample has been given at the beginning of this section. Specific information pertaining to sex, grade, residential setting, and academic achievement was reviewed, as well as the estimated times spent in reading.

This section summarizes additional miscellaneous information.

Of the 36 avid readers, 10 (27.8%) were the youngest in the family, 9 (25.0%) were a middle child, 16 (44.4%) were the oldest, and 1 (2.8%) was an only child. The mean number of older siblings was 1.07 and the mean number of younger siblings was 0.92. The notion that the oldest child in the family is more inclined than his siblings to be achievement-oriented, and thus more inclined to strive toward success in reading activities, can only be partially upheld.

The average number of interviews was 3.34.

Two children of the 36 had only one parent at home, while two other families consisted of a remarriage or a common-law marriage. Two additional families were in some state of disarray because of one or both parents drinking excessively.

In 24 cases (66.7%) the mothers were not working full-time while their avid-reading children were still of preschool age. In the other 12 cases (33.3%) the mothers did work while their children were young. This latter group contained five children described as being "maladjusted" to some extent. This finding certainly bears strong implications for a causal relationship between working mothers and "maladjusted" children.

Eight families (22.2%) of 36 commonly spoke another language at home, but this did not always indicate that the children were bilingual.

In 20 families (62.5%) of 32, church attendance was regular. There was a wide variation of religious preferences representing the denominations of the community. Ten families (31.25%) did not state any church activity, and two families from the pilot study (6.25%) were not queried on this point which was only added to the "Parental Questionnaire" after some interviews had already commenced.

One finding totally unexpected was that of left-handedness. If one assumes that left-handedness occurs in 5 to 10% of the population, and that there is a greater incidence of left-handedness and mixed dominance among retarded readers, then capable readers should logically have a lower incidence of left-handedness. But the reverse was true. Of 36 avid readers, eleven (30.5%) were left-handers in writing, while another student was claimed by his parents to be ambidextrous in writing (but this was not observed, and thus not considered as a true left-hander in the group of eleven).

Nonetheless, 30.5% of this group of avid readers were left-handed. An analysis of variance between the left-handers and right-handers on the 40 most important variables demonstrated no significant differences between the two groups. Referring back to Table 4.1, one can see that the left-handers performed at the extreme ends of the ranges in 17 out of 28 possibilities (or 60.7% of the cases as compared with their representation of 30.5%).

One explanation for this unusual phenomenon has been proposed by Paul Bakan (1970, 1973). He studied handedness in alcoholics and hypnotic-prone students, and made two conclusions relevant to this study. First, left-handers are more likely than right-handers to score at the high and low extremes of the hypnotizability scale

(Bakan, 1970), and this writer would extrapolate that idea to include other scales (particularly intelligence). Second, there is a higher than usual frequency of left-handedness in groups of the cerebral palsied, epileptics, mentally retarded, delinquent (Bakan, 1973), and to this can be added avid readers. Bakan explains these anomalies in terms of brain pathology resulting from birth complications. This writer is not familiar with any other research which could explain the unusually high incidence of left-handedness within the avid readers, but there would seem to be a trend for left-handedness and other atypical traits to occur more frequently in groups which are selected on some extreme positions on a criterion.

A partial follow-up study using other classrooms in the same community was unable to replicate these results as clearly. In this situation, 63 names of avid readers were submitted by 21 teachers. Of these 63, seven (or 11.1%) were left-handed, which is much less than anticipated, but still higher than the averages one would expect from a random sample.

III. SUMMARY OF IMPORTANT FINDINGS

Of the 209 variables chosen for numerical analysis, 40 were eventually selected as showing the most promise in terms of being relevant in describing avid readers. These 40 variables were selected through a system of comparing several types of groups on the 209 variables. These groups were labelled as: male versus female, 3 grade groups, 3 family stability groups, low versus high IQ groups, 3 popularity groups, and left- versus right-handers. Then several one-way analyses of variances on these 40 items were calculated, using some of the above groups. Results were significant (.05) in some variables and not in others.

Figure 4.9 lists these 40 variables and indicates which (if any) of the groups arrangements showed any significant (.05) differences on these variables. Also included in this table in parentheses are differences which are significant at the .05 to .10 level.

Because of the number of subjects (N=36) and the number of variables being examined, i.e., 40, a two- or three-way analysis of variance was not performed. Therefore, great care must be taken in analyzing the results not to assume that each of the groups operates independently of the others. The manner of displaying the data does not show the interaction between groups, which may indeed by an important consideration.

But in general there are noticeable trends. The grade six students showed more creative ability than the grade two and four students; but the grade four students showed more personal and social adjustment on the CTP than either the grade two or six students. Grade six students displayed the most anxiety toward being evaluated in test situations, a result perhaps of the increasing importance of tests in the later grades. As can be expected, the grade

FIGURE 4.9

SUMMARY OF SIX ONE-WAY ANALYSES OF VARIANCES ON 40 VARIABLES

x indicates a difference significant at .05

(x) indicates a difference significant at .05 to .10

VARIABLE	GRADE GROUP	SEX GROUP	AVIDNESS GROUP	FAMILY GROUP	SELF-CONCEPT GROUP	HANDEDNESS GROUP
Sex						
Grade			x		(x)	
Torrance verbal fluency	x					
Torrance verbal flexibility	x		(x)			
Torrance verbal originality	x					
Torrance figural fluency						
CTP personal adjustment	x				x	
CTP social adjustment	x				x	
CTP total adjustment	x				x	
Test anxiety	x			x	x	
Self-concept Cards: Total					x	
Behavior					x	
School					x	
Family					x	
Popularity					x	

FIGURE 4.9 (continued)

VARIABLE	GRADE GROUP	SEX GROUP	AVIDNESS GROUP	FAMILY GROUP	SELF-CONCEPT GROUP	HANDEDNESS GROUP
Self-concept Cards:						
Physical status			(x)		x	
Calmness					x	
Happiness					x	
What I Would Like to do Best:						
Social		(x)				
Academic		(x)				
Sensual						
Teacher Interview:						
Learning			x	x		
Motivation			x	x		(x)
Creativity			x			(x)
Leadership	(x)		(x)		x	
WISC:						
Vocabulary				x		
Verbal IQ				x		
Performance IQ		(x)	(x)	x		
Full scale IQ			(x)	x		
Number of minutes father reads weekly			x	x		
Number of minutes mother reads weekly						
Parents' estimates of number of minutes subjects reads weekly			x			

FIGURE 4.9 (continued)

VARIABLE	GRADE GROUP	SEX GROUP	AVIDNESS GROUP	FAMILY GROUP	SELF-CONCEPT GROUP	HANDEDNESS GROUP
Subjects' estimates of number of minutes subject reads weekly	(x)		x			
Achievement:						
Vocabulary	x		x		(x)	
Comprehension	x		x			
Arithmetic						
Spelling	x		x			
Handedness						
Family group			x			
Social popularity						

six students also performed better than grades four and two respectively in the achievement areas of reading vocabulary, reading comprehension, and spelling. This difference could not be shown for arithmetic since these scores were given in percentages which remained relatively stable across the grade levels.

No significant (.05) differences for sex were demonstrated, but the boys tended to be socially-oriented, while the girls were more inclined toward academic achievement than the boys.

As the students progress through school they tend to read more. Grade two students saw themselves as reading an average of 324.58 minutes per week; grade four students as 804.17 minutes per week; and grade six students as 758.75 minutes per week. The parents of these children estimated that their children read 505.00, 421.25, and 738.89 minutes per week respectively. The more the students read, the higher they were rated by their teachers in the areas of learning characteristics, motivational attributes, and creative abilities. The number of minutes the child read weekly was significantly (.05) related to the amount of time the father spent reading, but not related significantly (.05) to the amount of time that the mother spent reading. The more the child read, the better his achievement level in reading, although this finding could also be explained by the fact that the achievement level increases with grade level; and that it is the age which influences both achievement and avidness. Finally, the children from moderately- and well-adjusted families show more reading avidness than the children from broken and poorly-adjusted families.

Family stability also has an impact on the avid readers. Those children from broken families showed significantly (.05) more anxiety toward tests, had lower intelligence test scores, and were rated low in learning and motivational attributes. Conversely, children from close families where the parents are involved with many facets of their children's activities showed the opposite results -- less anxiety, higher intelligence scores, and more learning and motivational characteristics.

The avid readers showing the highest self-concepts also demonstrated less test anxiety and more leadership qualities (suggesting confidence in their own abilities) than avid readers with poor self-concepts. It could not be said, however, that avid readers with healthy self-concepts came from well-adjusted families, although the results are indicative of this tendency.

There were no significant (.05) differences suggested between left- and right-handers on any of the final 40 variables.

In summary, this chapter by no means exhausts all the findings of the several testing instruments. Major findings were disclosed and briefly explored, and minor findings were given cursory acknowledgement. The result has been the intertwining of several themes which are related to the main concern of this study in the next chapter.

There are definite characteristics of avid readers, and in the sample used in this study the following factors have remained as the most relevant: grade, creativity, self-concept, intelligence, social popularity, personality, and family adjustment. The interrelationship of these elements in describing patterns of avid readers is offered in the concluding chapter.

CHAPTER V

DISCUSSION AND IMPLICATIONS OF THE FINDINGS

The preceding chapter summarized the major findings pertaining to avid readers. To this point several factors have been identified as being relevant in describing avid readers, and this chapter will attempt to unite these factors into various patterns descriptive of motivated readers. In addition, these results will be discussed in reference to the purpose of this study, limitations will be delineated, implications for teaching and curriculum and for research will be drawn, and finally, a concluding statement will be offered.

I. PATTERNS OF READING MOTIVATION

That motivated (avid) readers are different from their nonavid-reading peers is apparent. The prime difference is obviously the expressed keenness that these avid readers have toward reading activities. The only single characteristic possessed by all 36 avid readers was their enthusiasm for pursuing reading. No other trait measured by the battery of tests was displayed universally by this sample, although some traits were possessed by many avid readers. For example, many of the avid readers were above average in achievement, but not all subjects demonstrated that tendency.

The task now is to identify patterns which will depict the differences that avid readers show among themselves. These differences are portrayed in Tables 5.1 and 5.2 which give the original data and then the positions of all 36 subjects relative to each other on the seven foremost traits.

The subjects are denoted by number to protect their identity.

In each of the seven characteristic traits, three levels were isolated: Hi (high), Me (medium), and Lo (low). Also Hi+ indicated a very high demonstration of a trait by a particular student, and Lo+ similarly showed a very low amount of that trait. For example, Lo+ for intelligence indicated a very low IQ score of below 90.

This classification of avid readers into one of these three levels for each trait was undertaken for several reasons -- to facilitate comparisons between readers on the basis of three verbal descriptions rather than many numerical descriptions -- to provide a framework or method of comparing scores of different values wherein achievement scores, for example, expressed in grade levels, could be compared to self-concept and intelligence scores having different means and distributions -- and to provide a workable system of organizing much data into manageable units for the purpose of identifying patterns and characteristic traits of avid readers.

TABLE 5.1

ORIGINAL DATA CONCERNING THE AVID READERS

SUBJECT NUMBER	FULL SCALE WISC SCORE	RANK IN SOCIAL POPULARITY	RANK IN SOCIAL UNPOPULARITY	TORRANCE CREATIVITY SCORE	TOTAL SCORE ON SELF-CONCEPT CARDS	AVERAGE GRADE SCORE IN ACHIEVEMENT	SCORE ON THE MODIFIED TASC
1	96	11	8	74	871	4.3	2
2	128	6	17	79	649	5.3	6
3	114	1	23	83	666	9.7	10
4	122	20	22	124	686	10.5	4
5	125	18	21	83	670	10.7	5
6	92	26	1	84	601	8.7	22
7	122	1	17	51	709	5.6	0
8	128	16	7	87	734	4.1	4
9	109	10	21	119	756	6.3	0
10	123	5	5	57	927	6.0	1
11	109	30	4	155	660	9.4	13
12	128	9	27	184	723	9.9	2
13	132	3	24	78	792	5.3	1
14	133	13	1	140	740	9.4	11
15	110	24	21	40	811	3.8	0
16	121	9	10	40	772	7.1	1
17	107	12	18	123	842	7.0	1
18	123	3	14	202	699	9.4	5

TABLE 5.1 (continued)

SUBJECT NUMBER	FULL SCALE WISC SCORE	RANK IN SOCIAL POPULARITY	RANK IN SOCIAL UNPOPLARITY	TORRANCE CREATIVITY SCORE	TOTAL SCORE ON SELF-CONCEPT CARDS	AVERAGE GRADE SCORE IN ACHIEVEMENT	SCORE ON THE MODIFIED TASC
19	103	25	14	144	766	8.4	8
20	110	13	15	178	853	8.5	0
21	85	18	14	136	641	7.0	16
22	111	19	26	178	802	7.5	6
23	91	22	5	86	653	3.0	12
24	133	6	26	70	811	5.9	0
25	107	1	21	37	787	5.3	3
26	113	7	26	123	876	7.7	3
27	117	2	19	40	674	5.2	14
28	107	4	18	114	761	9.7	14
29	127	8	16	98	760	9.2	1
30	111	7	9	70	776	4.2	2
31	129	3	16	84	738	4.9	3
32	115	19	26	125	733	9.3	1
33	113	24	22	44	835	6.4	1
34	128	18	26	63	770	9.3	1
35	109	12	23	149	555	6.7	23
36	119	13	18	89	722	9.3	7

TABLE 5.2

POSITIONS OF THE AVID READERS RELATIVE TO EACH OTHER ON THE SEVEN FOREMOST TRAITS

SUBJECT NUMBER	GRADE	SEX	IQ	SOCIAL RELATIONS	CREATIVITY	SELF-CONCEPT	FAMILY RELATIONS	ACHIEVEMENT	ANXIETY
1	2	M	Lo	Lo	Me	Hi	Lo	Lo	Me
2	2	F	Hi	Hi	Hi	Lo	Me	Me	Me
3	6	M	Me	Hi+	Lo	Lo	Hi	Me	Lo
4	6	F	Me	Me	Me	Lo	Me	Me	Me
5	6	M	Hi	Me	Lo	Lo	Me	Hi+	Me
6	6	F	Lo+	Lo+	Lo	Lo+	Lo	Lo	Lo+
7	2	F	Me	Hi+	Lo	Lo	Me	Hi	Hi
8	2	F	Hi	Lo	Hi	Me	Hi	Me	Me
9	4	M	Lo	Me	Me	Me	Me	Me	Hi
10	2	M	Hi	Me	Me	Hi+	Hi	Hi+	Hi
11	6	F	Lo	Lo+	Hi	Lo	Me	Me	Lo
12	6	F	Hi	Me	Hi+	Me	Hi	Hi	Me
13	4	F	Hi+	Hi+	Lo	Hi	Hi	Lo	Hi
14	6	M	Hi+	Lo+	Me	Me	Hi	Hi	Lo
15	2	M	Me	Lo	Lo	Hi	Me	Lo+	Hi
16	4	M	Me	Me	Lo+	Me	Lo	Me	Hi
17	4	M	Lo	Me	Me	Hi	Me	Lo	Hi
18	6	M	Hi	Hi	Hi+	Lo	Me	Me	Me

TABLE 5.2 (continued)

SUBJECT NUMBER	GRADE	SEX	IQ	SOCIAL RELATIONS	CREATIVITY	SELF-CONCEPT	FAMILY RELATIONS	ACHIEVEMENT	ANXIETY
19	6	M	Lo	Lo	Me	Me	Lo	Lo	Me
20	4	F	Me	Me	Hi+	Hi	Me	Hi	Hi
21	6	M	Lo+	Lo	Me	Lo	Lo	Lo+	Lo
22	4	F	Me	Me	Hi+	Hi	Hi	Me	Me
23	2	M	Lo+	Lo	Hi	Lo	Lo	Lo+	Lo
24	2	F	Hi+	Hi+	Me	Hi	Hi	Hi+	Hi
25	4	F	Lo	Hi+	Lo	Hi	Me	Me	Me
26	4	F	Me	Hi	Me	Hi	Hi	Me	Me
27	2	F	Me	Hi+	Lo	Lo	Hi	Me	Lo
28	6	F	Lo	Hi	Me	Me	Me	Me	Lo
29	4	M	Hi	Hi	Me	Me	Hi	Hi+	Hi
30	2	M	Me	Me	Me	Hi	Me	Lo	Me
31	2	F	Hi	Hi	Hi	Me	Hi	Me	Me
32	4	F	Me	Me	Me	Me	Hi	Hi+	Hi
33	2	M	Me	Lo	Lo+	Hi	Me	Lo+	Hi
34	6	M	Hi	Me	Lo+	Me	Me	Lo	Hi
35	4	F	Lo	Me	Hi	Lo+	Lo	Lo	Lo+
36	4	M	Me	Me	Lo	Me	Hi	Hi+	Me

The following detailed explanation of how the subjects were ranked in each trait is based upon the summary of the data presented in Table 5.1.

With two of the traits, there was no attempt made to categorize students evenly with one-third of the group falling into each area of high, medium, and low. In the social relations category, which was an index of the subject's popularity in the classroom, the subject's rank order in the popular choices of his peers was compared with his rank order in the unpopular choices. If the student displayed high popularity and low unpopularity, he was classified "high" in the social trait (12 cases). A student who had a low popular-choice rank and a high unpopular-choice rank was rated as having a "low" social trait (10 cases), while those students having about the same rank in popular and unpopular choices were described as "medium" (14 cases).

The assignment of students to the three positions in family adjustment, the other trait with no fixed distribution, was somewhat subjective. "Low" students came from families of broken marriages, instability because of alcoholism, and stressful relationships due to situational factors. There was no difficulty in identifying these seven cases. Students rated as "medium" (15 cases) came from families appearing to have normal or typical familial relationships, while students rated as "high" (14 cases) were from families seemingly having great personal involvement and caring, often made obvious by the extent to which parents of these children were involved in their children's activities, were aware of their children's development, and were united in their own beliefs of discipline and childraising.

The family atmosphere was so discernible that the writer was readily able to categorize these families on the basis alone of the personal interview with the parents. Some data certainly aided in verification. Data gathered during the family interviews revealed the extent of the parental involvement with the children's activities, the attitudes that the parents had concerning discipline and childrearing practices, the extent to which the parents were knowledgeable about their children's attitudes, and other information concerning the parent-child interaction within that family.

With respect to the other five traits, an attempt was made to place an equal number of cases into each of the three positions of Hi, Me, and Lo. Thus, one-third of the sample, or about 12 students, were placed in each of the three levels. It was felt that a three-part distribution would give sufficient means for comparing some avid readers to other avid readers within each trait and also between traits. Because the information within these traits was numerical, the decisions for inclusion of students in each of the three positions were more objective.

Grade two students were assigned a creativity position of "high" if their scores on the verbal section of the Torrance Tests of Creativity (Torrance, 1966) were above 79; "medium" for scores of 57 to 74; and "low" for scores below 51. For grade four students scores of above 149 were "high", 98 to 125 were "medium", and below 89 were "low"; and grade six scores of above 155 were "high", 114 to 144 were "medium", and below 84 were "low".

The self-concept scores used were taken from the total score that the students received on the "Self-concept Cards" (Appendix A_9). Scores of above 776 were rated as "high", from 722 to 772 were "medium", and below 709 were "low".

The full scale score from the WISC was used for determining the IQ position; a score of above 123 was given a "high" position, from 110 to 122 was "medium", and below 109 was "low".

The area of achievement was categorized according to grade level. As with the other traits, the four highest achievers in each grade were rated as "high", the middle four as "medium", and the bottom four as "low".

A position of "high" in the anxiety trait should not be construed as indicating a high level of anxiety, but as a high level of calmness (absence of anxiety). Students whose scores on the "Modified Test Anxiety Scale for Children" (Appendix B_3) were zero or one were given a "high" rating, 2 to 8 were "medium", and above 10 were "low".

At this point it might be worthwhile to review and refocus the intent of this segment of research. In essence, so much information has been gathered concerning avid readers that it is difficult merely to summarize what might be considered relevant and important, and to separate the important from the unimportant findings. Seven areas have accordingly been proposed as offering the most useful and concise manners of describing avid readers. Within these seven areas of intelligence, social relationships, creative ability, self-concept, family relationships, achievement levels, and anxiety, the sample of 36 avid readers may be grouped into three levels equivalent to high, medium, and low. This grouping was done for the purpose of comparing avid readers with each other, not with any random sample, or with able readers, or with any normalized group. Thus, it is essential to bear in mind that a profile of traits depicted below reflects the preponderance of such traits _relative to other avid readers_ of the sample.

What is proposed is a tentative classification of the major forces that appear to be inducements to reading behavior, i.e., apparent patterns of features that may be associated with avid readers. The seven aforementioned traits would seem to be the most substantial forces depicting avid readers and reading avidness (any causal relationships can only be implicated based on this research alone).

The labels to the following patterns were chosen after a careful consideration of the data available for each group and assumptions about how the traits within each group or pattern were interrelated. Thus these labels, while seemingly implying a causal relationship, were used mainly for ease of classification and discussion. Furthermore, within the discussion of each pattern of avid readers, not only is data presented but also speculation concerning possible relationships between traits is given. It was felt that this speculation, however unfounded because of lack of sufficient evidence, may be useful in elaborating upon the association of the traits in the particular category of avid reader, as well as indicating many possible areas of research still needed. What follows, then, are tentative categories for analyzing the syndromes and patterns of traits of avid readers.

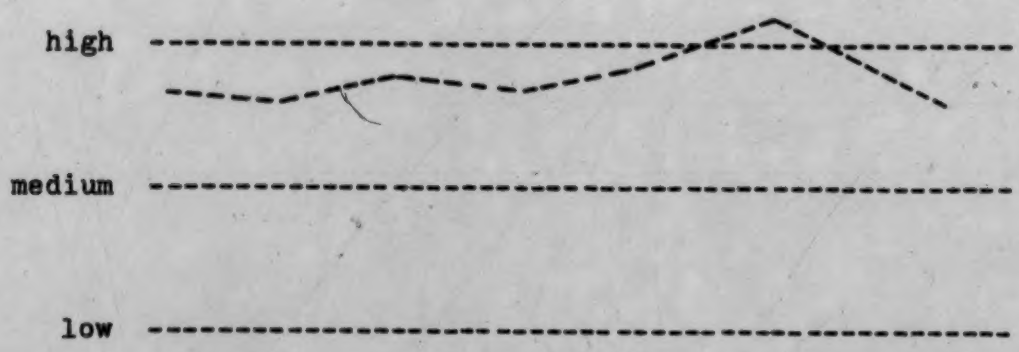
A. Students Extending Their Cognitive Competence Through Reading

One of the most outstanding profiles of reading avidness occurs in the case of the readers who rank exceptionally high in most of the seven areas. Their profile is illustrated in Figure 5.1.

Of these nine cases, seven were girls. These students performed exceptionally well in terms of achievement, and appeared to have little anxiety toward school. They scored high on creativity, had relatively high IQ scores (ranging from 110 to 133, with a mean of 121.0), and were very well-liked by their peers. In terms of self-concept and family relations, both areas suggested very

FIGURE 5.1

PROFILE OF THE STUDENTS EXTENDING THEIR COGNITIVE COMPTETENCE THROUGH READING



SUBJECT NUMBER	IQ	SOCIAL RELATIONS	CREATIVITY	SELF-CONCEPT	FAMILY RELATIONS	ACHIEVEMENT	ANXIETY
10	Hi	Me	Me	Hi+	Hi	Hi+	Hi
12	Hi	Me	Hi+	Me	Hi	Hi	Me
20	Me	Me	Hi+	Hi	Me	Hi	Hi
22	Me	Me	Hi+	Hi	Hi	Me	Me
24	Hi+	Hi+	Me	Hi	Hi	Hi+	Hi
26	Me	Hi	Me	Hi	Hi	Me	Me
29	Hi	Hi	Me	Me	Hi	Hi+	Hi
31	Hi	Hi	Hi	Me	Hi	Me	Me
32	Me	Me	Me	Me	Hi	Hi+	Hi

good adjustment. In short, they had "everything going for them".

The parents of these children expressed a keen interest in their children's activities within the school and within the community, and the whole family was often involved in recreational and social activities such as camping and 4-H. During the interviews with these parents the father usually showed as much awareness as the mother concerning their child's development. Fathers would often volunteer information about the child's attitude in grade one, his likes and dislikes, his peer relationships, his anxieties, and other information about the child. The parents often stated that they encouraged their children to develop themselves in many avenues of endeavor -- in sports, crafts, youth groups, music training, religious education, and so forth. Although this attitude of encouragement was shown in the parent interviews, it was not objectively assessed.

As a group these readers are talented. What they do, they seem to do well. They are usually good athletes, well-liked by teachers, and are claimed by their teachers to be more mature and responsible than their classmates. Excelling in schoolwork is a portion of their credentials. Total involvement in projects is common -- their supply of energy seems limitless -- and so it is with reading. When they choose to read, they do it with an apparent gusto -- a keenness common to most of their undertakings. Their avidness (and achievement) in reading is indicative of but one of their many attainments.

The fable is told of King Midas where all that he touched was turned to gold. These avid readers who excel in so many areas seem to be blessed with the same talents -- whatever they attempt seems to turn to a successful accomplishment.

B. Students Seeking Solace In Reading

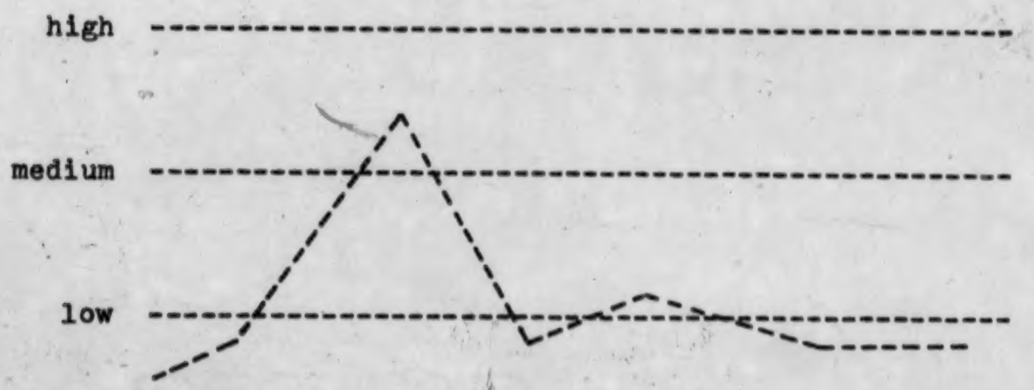
In comparison with the group of readers who excelled in many traits, the students in this group appear to lack such positive attributes. They give the impression of being social outcasts because of their low self-concepts and social rejection by peers. The family situation of the readers in this group is very clear and unmistakable -- and oddly the most commonly associated characteristic of this type of student is that they are from broken homes (see Figure 5.2).

Consider first the number of traits in Figure 5.2 which were extremely low, i.e., Lo+. A second obvious trend is that of the number of low traits -- each student having at least four.

These students are characterized by low ratings in almost all of the traits assessed (with the exception of creativity). They appear to be social isolates, show very poor self-concepts, have low intelligence and achievement scores, exhibit a great deal of anxiety about school,

FIGURE 5.2

PROFILE OF THE STUDENTS SEEKING SOLACE IN READING



SUBJECT NUMBER	IQ	SOCIAL RELATIONS	CREATIVITY	SELF-CONCEPT	FAMILY RELATIONS	ACHIEVEMENT	ANXIETY
6	Lo+	Lo+	Lo	Lo+	Lo	Lo	Lo+
11	Lo	Lo+	Hi	Lo	Me	Me	Lo
19	Lo	Lo	Me	Me	Lo	Lo	Me
21	Lo+	Lo	Me	Lo	Lo	Lo+	Lo
23	Lo+	Lo	Hi	Lo	Lo	Lo+	Lo
35	Lo	Me	Hi	Lo+	Lo	Lo	Lo+

and probably most important of all, come from broken families. Only their creative ability is not consistently low, with three of these avid readers even showing high creativity.

These types of students sometimes create behavior problems in the classroom and the occurrence of these students among the ranks of the avid readers was not expected.

The role of the parents of these low-scoring avid readers in either helping or hindering the development of their children's avidness in reading is not clear. However, certain events within these families may lead to a picture of instability and an attitude of parental unconcern. For example, of these six families, two denied interviews with the researcher. Could this be a reflection of parental disinterest? Economic hardships were seen in four of the six cases (evidenced in poor clothing, home decoration, and general life-style of the family). Alcoholism was described by the parents as a problem in three of the six families. Divorce or separation was evident in all six cases.

Frequently such events within a family do lead toward instability. If this is the case with these low-scoring avid readers, then books and reading may possibly offer some solace for the child.

It can be said that books may give security. The story line of almost every children's book is from despair to a happy ending. These children may know the despair within the family, but may lack the resolution of despair as is often found in the happy ending.

Books can provide consistency, a form of activity that these children might be able to control, happiness, a resolution of despair, and a source of trouble-free activity. These children sometimes stated that they literally "withdrew" or "retreated" to other locations in their home to be away from the disturbances -- hence a form of "escape" reading. These children seem to find solace in reading.

Why should some students with such problems become avid readers while other students do not? Avidness in reading may sometimes provide the only chance to excel where sports, misbehaviors, and peer contacts do not always do so. These avid readers were usually very timid in the interview and testing sessions, and it may have been that aggression was likely not a part of their behavioral repertoire.

Their reading preferences were usually non-fiction and often included materials minimally acceptable at their grade levels. This tendency may also be a result of their poor reading ability.

These students possibly found a comfort in books that they may have lacked to some degree at school and home. It could be supposed that the eagerness with which these students sought to read might be a strong reaction to some discomfort in their home and school situations, and that the more the students read, the more consolation they may have found in reading. That other students not from broken families may also find solace in reading is a possibility that should not be overlooked.

C. Students Using Reading For Introspection

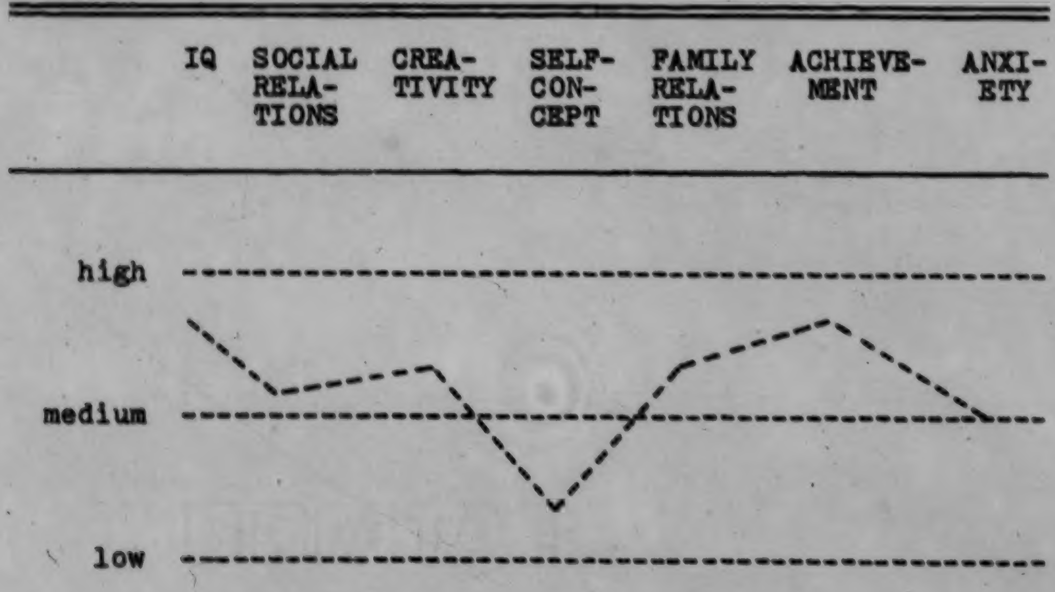
The six students chosen for inclusion in this category were students who were described by their teachers in some manner as being "bookworms", i.e., whenever a spare moment arose in the classroom, these students were most often seen reading a book. Furthermore, these students were well-behaved, according to their teachers, and were usually shy or timid.

The two outstanding characteristics of these six readers as illustrated in Figure 5.3 are their relatively poor self-concepts and high intelligence scores. They are competent achievers, and have little anxiety about school; their family backgrounds suggest stability and they seem to be quite creative.

Frequently a classroom will contain a shy, reserved, very quiet, and very well-behaved student who seems to be adept in schoolwork and peer relationships, but who might have chosen to voluntarily retreat from the normal classroom bustle. These are students who appear to be introverted, and would perhaps prefer to seek the companionships of books rather than those of friends. They do not appear to be social isolates, for they seem to be able to

FIGURE 5.3

PROFILE OF THE STUDENTS USING READING FOR INTROSPECTION



SUBJECT NUMBER	IQ	SOCIAL RELATIONS	CREATIVITY	SELF-CONCEPT	FAMILY RELATIONS	ACHIEVEMENT	ANXIETY
2	Hi	Hi	Hi	Lo	Me	Me	Me
4	Me	Me	Me	Lo	Me	Me	Me
5	Hi	Me	Lo	Lo	Me	Hi+	Me
8	Hi	Lo	Hi	Me	Hi	Me	Me
18	Hi	Hi	Hi+	Lo	Me	Me	Me
36	Me	Me	Lo	Me	Hi	Hi+	Me

extend themselves personally if required, but maybe because of their own timid natures, they seek and find consolation in books, not people and activities.

It should be stressed here that these students may have the capability of being popular because they seem to have the adequate social skills but they may not choose to use them. Only one student in this group was not well-liked by her classmates. Thus these students may be socially acceptable, but perhaps they do not feel comfortable with personal interactions, become increasingly frustrated, and subsequently may lose self-confidence and develop low self-concepts.

There is nothing presented in the data collected about these students that would cause their classmates to shun them. It could be that their timid personal natures may create an aura of being "wall flowers", and eventually these students might begin to lose the capacity to establish personal ties, and they may become more and more withdrawn. Thus, reading for these intropsective students could possibly become a means of avoiding social contacts and engaging in a substitute activity which is acceptable to parents and teachers.

The avid readers of this group may tend to seek passive activities. Reading is considered by many to be a relatively passive activity, and thus a pattern of deliberately seeking reading because of its passive nature may develop more fully in this group of students. From the family interview it was deemed that these students were usually conservative, obedient, and came from families where there appear to be solid family relationships, but limited warm interpersonal interactions, and thus these students likely do not find pleasure in friendships, but within themselves from reading.

D. Students Prone To Extrinsic Rewards

Children frequently undertake a behavior or a behavior pattern because of the rewards accrued to them as a result of their behaviors. The behavior of engaging in reading activities is no exception, for incentives commonly arouse motivation to read vast quantities of material.

The problem lies in identifying these students. How does one know for sure that a student is reading to gain personal recognition, material prizes, attention, or other pleasurable stimuli -- rather than reading for the sheer internal joy reading gives him? One solution to this question is to examine the history of the reading behavior of the student, as well as observing his reading behavior in later grades. Students who show no particular reading avidness in earlier grades, and who suddenly show great interest in reading books, to be followed by a return to reading lethargy are possible candidates for inclusion in this category. Their one burst of reading keenness may be indicative of a rewards-based classroom program.

These subjects who have tentatively been identified as students prone to be readily motivated to read by extrinsic rewards include subjects 1, 9, 17, 30, and 33. All five subjects were boys -- two from grade two and three from grade four. A profile of their pattern of traits is given in Figure 5.4.

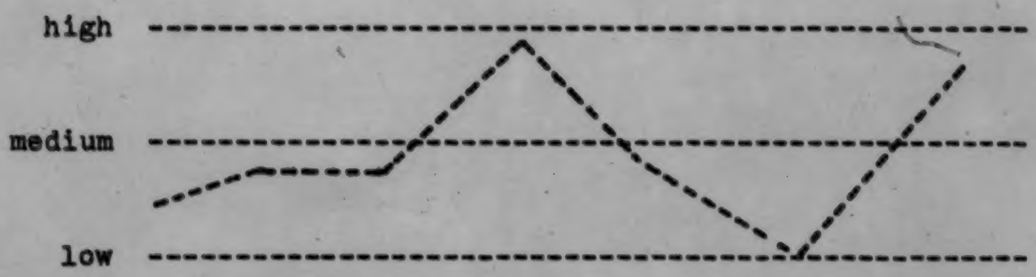
These students are seen as having high self-concepts and as not appearing to be anxious about school situations. Their family relationships seem to be relatively stable, while their social acceptance by peers is not as great as that of some of the other avid readers. These avid readers are also characterized by an achievement level that is still above average in terms of the classroom, but yet below the mean for the avid readers as a group.

These avid readers who are possibly motivated by external incentives may not continue this involvement in reading because the material gains may lose the power of incentives. Their interest in reading is perchance a fleeting behavior which may be typical of their lifestyles -- they might readily adopt and subsequently abandon behaviors to the extent that these behaviors are materially rewarding. These types of students might readily become involved in programs offering a system of rewards.

It is hypothesized that these students have become oriented toward material gains by the manner in which they were raised. Children may often undertake only those activities that are gainful rather than recreational, by

FIGURE 5.4

PROFILE OF THE STUDENTS PRONE TO EXTRINSIC REWARDS



SUBJECT NUMBER	IQ	SOCIAL RELATIONS	CREATIVITY	SELF-CONCEPT	FAMILY RELATIONS	ACHIEVEMENT	ANXIETY
1	Lo	Lo	Me	Hi	Lo	Lo	Me
9	Lo	Me	Me	Me	Me	Me	Hi
17	Lo	Me	Me	Hi	Me	Lo	Hi
30	Me	Me	Me	Hi	Me	Lo	Me
33	Me	Lo	Lo+	Hi	Me	Lo+	Hi

virtue of the principles of competition, work ethics, and material advancement instilled by their parents. They do not seem to have the ability to excel exceptionally well in their schoolwork, yet their positive self-concepts seemingly provide an impetus to seek out rewarding behaviors. They may lack parental attention to some degree, and therefore seek recognition and security in other areas.

Once the rewards are removed or have lost their power to stimulate, then the student may move on to another pleasure-seeking activity, and may not fully internalize the self-rewarding nature of reading. Further follow-up will hopefully clarify the nature of the development of the reward system in these students. Their fate, though, seems to have been surmised by the comment of one teacher on a questionnaire -- "He appears to have stopped reading after finishing his reading chart."

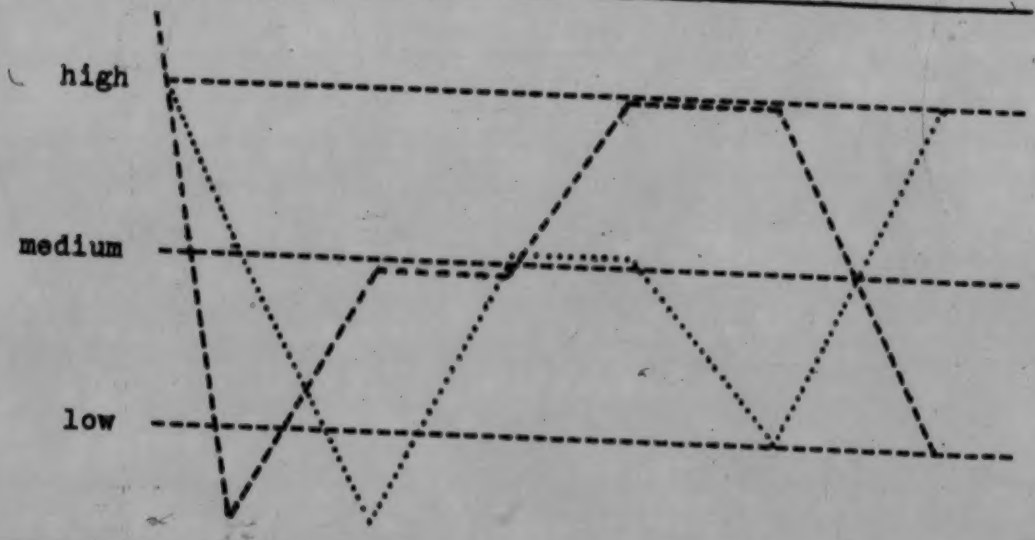
E. Students Seeking Cognitive Stimulation

This category of avid readers only has two subjects in it. More subjects to substantiate this pattern were desired, but unfortunately none were suitable. Other subjects of the sample did not seem to fit into this category, nor could the two subjects of this category easily be placed in other groups. Although the supportive information of this group is insufficient at the moment, there would still seem to be a case, however tentative, for proposing this pattern of avid readers.

While most students did acknowledge that they read to "learn things", this reason for reading was not always apparent in their selection of books. However, there were two students, both grade six boys, who exhibited an almost exclusive preference for reading educational material as

FIGURE 5.5

PROFILE OF THE STUDENTS SEEKING COGNITIVE STIMULATION



SUBJECT NUMBER	IQ	SOCIAL RELATIONS	CREATIVITY	SELF-CONCEPT	FAMILY RELATIONS	ACHIEVEMENT	ANXIETY
14	Hi+	Lo+	Me	Me	Hi	Hi	Lo
34	Hi	Me	Lo+	Me	Me	Lo	Hi

compared with leisure material. Their profiles are shown in Figure 5.5.

Both boys were intellectually endowed, but one was a higher achiever than the other (the lower achiever of the two demonstrated more test anxiety).

Whereas their self-concepts and family relationships seemed to be good, the boys differed vastly in social acceptance. One boy was a social outcast -- his eccentric behaviors and verbalizations could have set him apart from his classmates. His preference for academic activities and scholarly reading material may have frequently alienated him from his peers. The other boy had similar traits, but appeared to involve himself personally with some class activities, too.

Both boys were very knowledgeable in the scientific field, and apparently did not seek the companionship from others in the classroom who were not interested in chemistry, electronics, aviation, biology, and other areas into which these boys ventured.

These types of students appear to be motivated largely by a cognitive drive, or as stated by Jenkinson (1964, p. 49), by "a thirst for understanding . . . to satisfy curiosity through reading." This cognitive drive was strong in children of higher intelligence and not as evident in children of lower intelligence, as Jenkinson had suggested.

It is probably no mere coincidence that the subjects fitting into this category were both boys from grade six. Fluency in reading (to the extent of learning from what one reads rather than learning to read) is usually not gained until the later elementary grades. Then the wealth of information available to the reader expands at a phenomenal rate as his reading ability and interests grow. Younger children have not yet gained the expertise in reading to expand their knowledge from it. Older children can select material according to what they wish to learn (or enjoy) from it.

At the grade six level boys have a much broader range of factual information pertinent to their age and sex to choose from than do the girls. Girls would tend to choose biographies, natural sciences, and wildlife areas in their selections; while boys would choose sports, pure sciences, and mechanics. Whereas the areas chosen by the girls are not usually applicable to their daily activities, the areas picked by boys, on the other hand, may be immediately utilized in the form of observing sports rules, building scientific equipment, and watching their father's efforts at car repairs.

Why some boys of similar backgrounds and traits do not also pursue knowledge-seeking reading activities is not clear. Certainly personality differences with respect to need for learning (cognitive drive), curiosity, and need for peer relationships may account for some differences.

F. Miscellaneous

To this point five groups or types of avid readers have been defined. However, the remaining eight subjects could not easily be categorized into distinctive patterns of traits, and yet there seemed to be enough of a weak thread of similarities in these latter subjects to propose two additional patterns, albeit very tentative. The first proposed pattern, containing only two students (and the dangers of proposing a pattern from only two subjects is recognized here), seems to describe students who might use reading as an escape from boredom. The second proposed pattern includes students whose reading behaviors may be reflections of their congenial personalities.

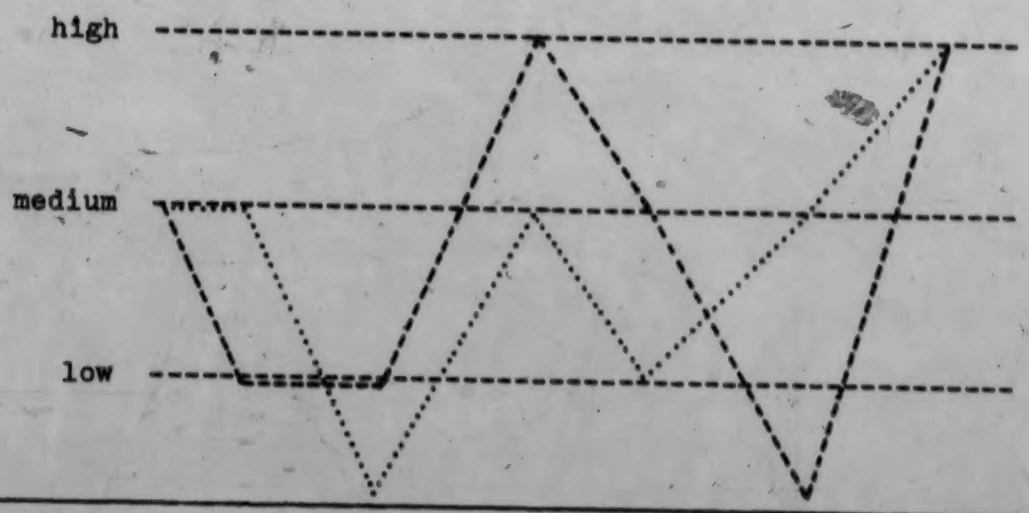
Some students seem to want to do little else not because they are necessarily prevented by others from doing so, but because they seem to choose to do so. They may find little interest in schoolwork, friendships may not be important, and there is "nothing else better to do", in their own words. This type of avid reader is not bored with reading, but likely bored with other activities (or lack of activities), and thus reading appears to be a second choice to other preferred pursuits. The profile of this type of avid reader is given in Figure 5.6.

Both subjects fitting this pattern were boys displaying low creative ability and low anxiety to school. They must be discussed separately to illustrate their differences.

Subject number 15 came from a family of supposed limited parental attention and affection. He was likely not encouraged at home nor at school to seek either educational or recreational activities and he was probably rather limited in his selections of activities. Having

FIGURE 5.6

PROFILE OF THE STUDENTS USING READING TO ESCAPE BOREDOM



SUBJECT NUMBER	IQ	SOCIAL RELATIONS	CREATIVITY	SELF-CONCEPT	FAMILY RELATIONS	ACHIEVEMENT	ANXIETY
15	Me	Lo	Lo	Hi	Me	Lo+	Hi
16	Me	Me	Lo+	Me	Lo	Me	Hi

some prohibitions placed upon him by teachers and parents, he apparently turned to books to escape boredom. Possibly few exciting alternatives were open to him.

Thus there may be more cases of children whose hands are so symbolically tied that reading offers one of the only means of excitement in their lives. This lad yet continued to have a healthy self-concept and adequate intelligence, but was likely becoming increasingly disenchanted with school -- which may have reflected upon his school achievement (Lo+). On his personality tests he showed that he was extremely reserved, almost to the point of being obsessively shy. Some other teachers in grades three and four seemed to have been able to remove some of his social problems, and a follow-up of his case revealed that he was still a competent reader, but was beginning to actively seek social contacts and other activities. For this boy, avid reading was perhaps symptomatic of a problem -- a seeking of activity to ward off sensory and social deprivation.

The case of the second boy is slightly different. He was not outwardly restrained from seeking activities, but instead was apparently ignored by his parents and left to choose his own form of entertainment. He was a rural student and lacked friends near his home. His older siblings were much older, married, and had children of his age.

He seemed to have great difficulty in adjusting to school life, but by the time he reached grade four (when he was described as being an avid reader), he had established adequate peer relationships (according to the results shown on his class' sociogram). He appeared not to be competitive nor did he seem to have any chances to participate in organized sports. His avidness in reading probably stemmed from his family life where a limited selection of activities and no peer relationships may have created a situation where he had plenty of time on his hands. Perhaps he was a rare case where television had little interest for him and reading was the next best alternative.

The limitations that these boys faced in their family circumstances are suggested in their low creativity scores.

It is a sad reflection upon the plight of these students when reading may be a last resort because "there is nothing else to do".

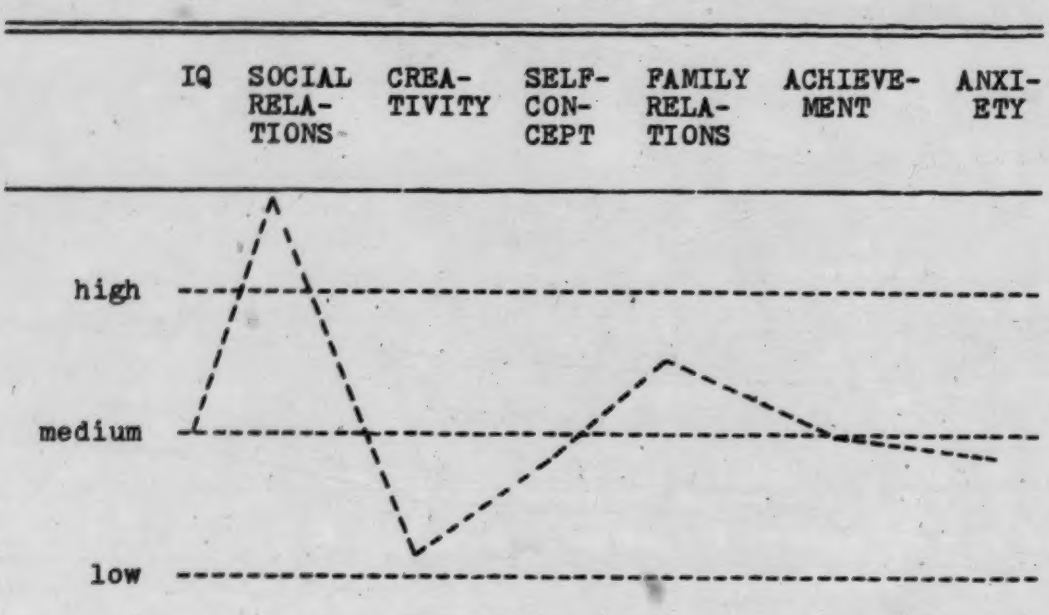
Another type of avid reader indicated by the results of this research are those students whose behaviors seem to demonstrate a desire to please others. These students might accordingly undertake various actions that others would find gratifying and may subsequently praise the reader. Their liking for and avidness in reading appear to be extensions of their amiable personalities -- for which teacher or parent would not find a student's positive reading attitude gratifying?

The profile of these readers is presented in Figure 5.7.

These readers have at least four apparent traits in common. They tend to be socially well-liked, are generally low in creative talent, come from seemingly stable families, and are above average achievers. Their self-concepts range from poor to good as do their intellectual abilities. Their anxiety toward school similarly shows a range of low to high.

FIGURE 5.7

PROFILE OF THE STUDENTS READING TO PLEASE OTHERS



SUBJECT NUMBER	IQ	SOCIAL RELATIONS	CREATIVITY	SELF-CONCEPT	FAMILY RELATIONS	ACHIEVEMENT	ANXIETY
3	Me	Hi+	Lo	Lo	Hi	Me	Lo
7	Me	Hi+	Lo	Lo	Me	Hi	Hi
13	Hi+	Hi+	Lo	Hi	Hi	Lo	Hi
25	Lo	Hi+	Lo	Hi	Me	Me	Me
27	Me	Hi+	Lo	Lo	Hi	Me	Lo
28	Lo	Hi	Me	Me	Me	Me	Lo

Of the types of avid readers described, this group of "congenial" readers is the least clear and shows the least amount of consistency with respect to common traits. Although the six students in this group all show a tendency to be popular, they are not consistently high in all the other traits. Their forté and focus seem to be on personal relationships. Their popularity would appear to originate from their cooperative attitudes, amiable dispositions, and willingness to "give and take".

The "congenial" readers appear to be specially oriented toward pleasing their parents. This impression was gained from the parental interviews. The home atmosphere suggested one of child obedience and servitude. Children were seemingly rewarded materially and affectionately (emotionally) for compliance with the parents' wishes. Even though other children have been raised on the same techniques, these children seem to have fallen into a pattern of constantly seeking approval from others. This approval might be given for appropriate social behaviors as well as for acceptable academic behaviors.

Reading is an innocuous activity that usually pleases teachers and parents, and in a sense, these readers may be seeking reinforcement in much the same way as other readers who seek out reading activities to gain material (extrinsic) rewards.

Thus the students who read to make good impressions on others may have found that in reading books they gain adult approval. Peer approval is not necessarily gained from reading books, but may be found in other positive actions. These readers also read for their own pleasure, but the major thrust for their reading avidness would likely originate from their desire to please others.

G. Summary of the Patterns of Avid Readers

Figure 5.8 presents in graphic form a summary of the patterns of avid readers.

Five groups of avid readers have been outlined (with possibilities for another two) but that is not to preclude the possibility that there may be other groups. Some children seemed to fit more than one pattern, and there certainly are characteristics overlapping from one pattern to another. Causal factors have been cautiously proposed, and it is important to note that a person possessing a combination of traits suggested in a pattern will not necessarily be an avid reader.

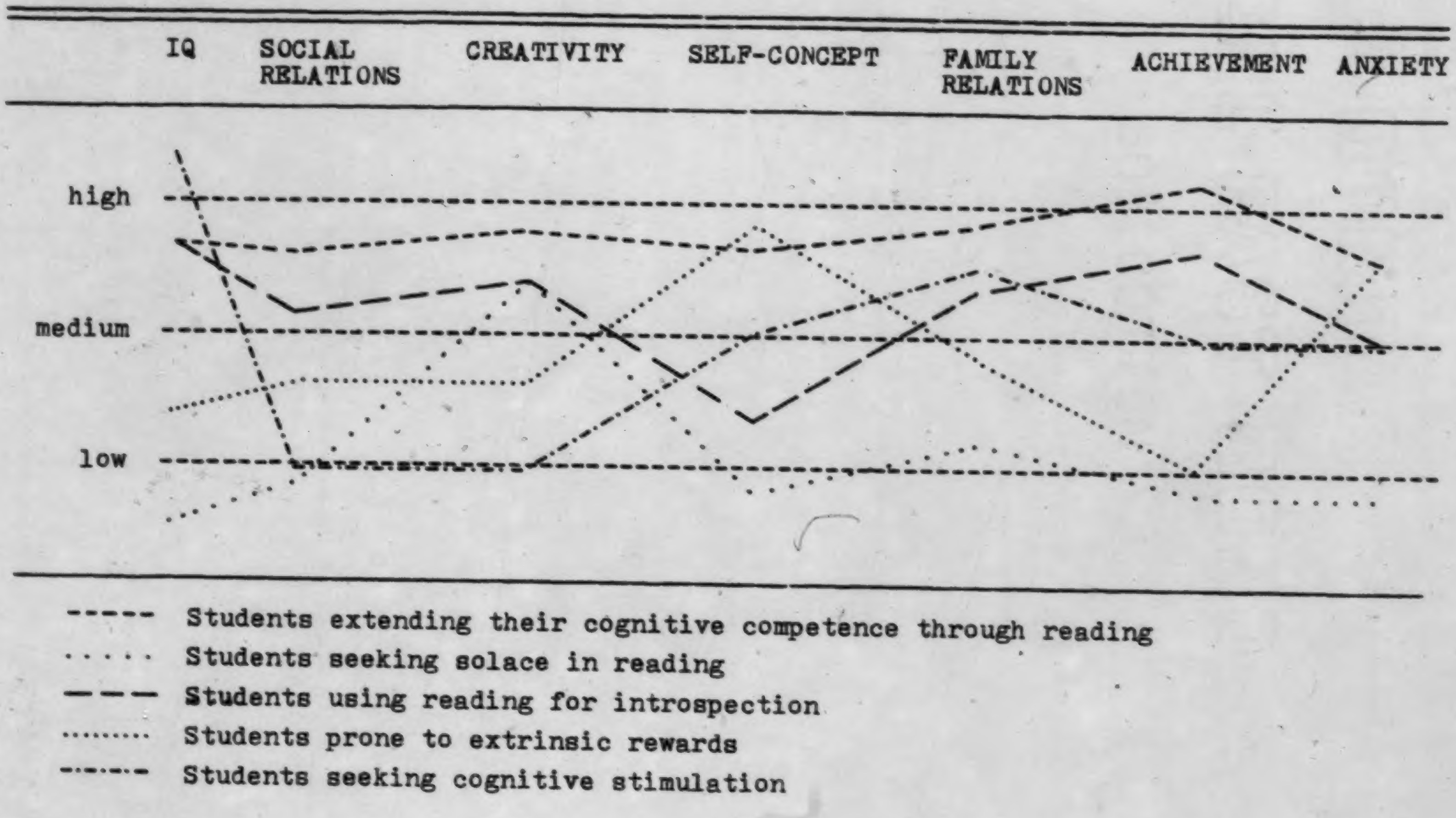
On the other hand, the training of children toward an avid-reading behavior is not an unrealistic goal, but there are prerequisite provisions, and some of these are suggested further in this chapter.

II. DISCUSSION

The results of this investigation into the characteristics of avid readers can be interpreted from several perspectives.

FIGURE 5.8

PROFILES OF PATTERNS OF AVID READERS



Avid readers as a group and as individuals, are not homogeneous. In other words, there appear to be more differences than similarities between individual avid readers and between patterns of individuals -- and yet they are all singularly categorized by their avidness in reading. Other than the fact that avid readers engage in much reading activity, there appears to be no other single trait which is characteristic of all the avid readers surveyed in this study.

From the mammoth amount of information collected on each of the 36 avid readers, certain trends may be postulated.

A. Achievement

Avid readers are usually, but not always, competent readers. While it is true that many avid readers read at grade levels far superior to that of their peers, there were also avid readers whose reading ability was at or slightly below grade level.

Achievement and interest often are correlated with each other. Thus, students usually do well in those activities that they enjoy, and conversely enjoy the activities in which they succeed. The competent avid reader exemplifies this -- he enjoys reading because he fairs well in it. But the avid reader of limited reading ability illustrates clearly that one need not necessarily excel in reading achievement to be an enthusiastic reader. Avid readers may and do seek pleasure in reading activities even though their reading achievement level is not great. Thus, the theory of need for achievement which explains behavior according to the desire a person has to attain success, does not fully explain why poor readers can become avid readers.

In summary, avid readers tend also to be competent readers, but poor readers, too, may also be avid readers. This finding is important for understanding the limitations of disabled readers, for teachers and clinicians often expect the poor reader to progress slowly at tasks in which he does poorly; but this research has indicated that even the poor reader may have a capability for becoming an avid reader, and thus greatly magnify his chances for success in remediation.

B. Intelligence

As in the case of achievement level, avid readers also tend to be above average in intellectual ability. However, even though the mean IQ score of the sample (i.e., 115.28) was well above average, the ranges of the IQ scores (91 to 133) indicated that both children of superior mental ability as well as those of below average mental ability may have the potential of becoming avid readers. In terms of remediation, clinicians and teachers should not therefore place limited expectations on nonavid (and often disabled) readers of below average intelligence; for though they are faced with debilitating circumstances in terms of reading ability at one point in time, they may in fact possess latent characteristics for becoming avid readers at some future point in their lives.

The effects of high reading activity to the intellectual development of children is not clearly illustrated within the confines of this research. But it is quite evident that avid readers generally have a good vocabulary, a broad scope of knowledge, and an ability to reason with abstract verbal concepts. These are three areas of intelligence which are highly verbal, and because the avid readers tend to do quite well in them one might expect that this would be a result of their repeated exposure to many verbal concepts through reading. Thus there is a strong implication that through much reading activity, one may broaden his powers of verbal reasoning, and subsequently better prepare himself for interpreting and utilizing written material.

C. Creativity

If the assumption is made that the *Torrance Tests of Creativity* (Torrance, 1966) are a valid assessment of the creative talents of avid readers, then the logical conclusion must be that these avid readers, taken as a group, are not as creative as their American peers. Of course there are exceptions, and a few avid readers did show promising creative abilities. One student subsequently won awards for her prose and poetry, while another student almost abandoned his leisure reading to devote more time to his artistic sketching. But these were the only two exceptionally creative avid readers.

Two logical conjectures of the finding that avid readers are not particularly creative would be that avid readers may not be expressive, nor do they seem to develop their facilities of divergent thinking through reading.

Reading can be regarded as a receptive skill in much the same way as is watching television, even though the former appears to require more complex cognitive abilities of memory, perception, comprehension, and mediation. Visual stimuli in reading are words and letters, and sometimes pictures; but the reader is guided by the author into creating an internal visual image of the characters, scenes, and actions within a story.

Thus, written verbal cues may provide the stimuli in forming creative imagery (and perhaps it is the fantastic, incredible dreams created in the minds of the avid readers that might draw them continually back to the printed word. Whoever has read only a portion of The Hobbit by J. R. R. Tolkien and not the whole book, has left a banquet after the hors d'oeuvres). It might be the case that avid readers have thus been conditioned to respond internally to written messages, and might have had little chance to express outwardly and creatively the uniqueness of their reading experiences.

To create an image from few cues is not the same as reconstructing an image from an ample supply of verbal cues (as written material does provide), and thus it may have been a difficult task for some avid readers to create "from nothing" as compared to "remoulding" what is already there.

D. Achievement Motivation

The use of projective techniques to assess a student's need for achievement was not undertaken in this study, but rather, objective means were used to appraise the student's desire toward academically-related areas.

Avid readers would frequently choose to participate in academic activities moreso than in play activities. Since most avid readers had attained a very competent level of academic achievement, their need to achieve seemingly would have been subsequently met, and thus they might not necessarily express in fantasy any great need for academic success.

Nevertheless, avid readers do appear to consider scholastic achievement very important. Likely this is a goal upheld strongly by the parents, and most children, avid readers or otherwise, would probably show similar desires.

The concept of achievement motivation is given limited recognition in this research. First, the extent to which it is used to explain contemporary motivation is so pervasive that its exclusion from this research would seem an oversight. Second, its use in explaining the motivation of avid readers may be limited, and thus it is given perfunctory acknowledgement.

E. Personality and Attitudes

The most outstanding personality feature exhibited by most of this sample of avid readers is considered by the writer to be their positive self-concepts, and in particular, their healthy self-concepts toward home and school. With some notable exceptions, avid readers generally feel good about themselves -- they seem to be a confident, happy, relaxed, well-adjusted group of children.

It would seem basic in describing the qualities of keen readers that their self-images, their estimations of their own limitations and acceptance by others, would correspond with healthy desires to attempt positive behaviors. The positive stimulations and feedback that they enjoy from reading would foster a feeling of confidence in their personal value. They might further seek positive reading behaviors, may become further reinforced and strengthened; and thus the intertwining of self-concept and reading activity results, much in the same way as does the relationship between self-concept and reading ability. Quandt (1972) and others are to be commended for continuing to stress the significance of the role of the self-concept in a person's reading growth.

The standardized personality tests used in this study revealed that as a group avid readers seem to be emotionally stable, self-assured, and uninhibited (socially spontaneous). This information correlates well with the expressed self-concepts of the avid readers, and additionally, suggests that avid readers may be independent in terms of social behavior -- that they may not necessarily be overly introverted, or shy, timorous folk.

The prominence of reading in their lives stated by these avid readers was impressive. Their attitudes toward reading were extremely favorable, as was expected. The time they stated that they devoted toward reading was sometimes meager, sometimes phenomenal, but it can be stated with no uncertainty that at this particular moment in their lives, they were indeed truly avid readers.

Avid readers seem to have a keen insight into what reading can do for them. They appear to have become very adept at reading, and control their reading preferences and behavior in much the same way as a guitarist adds his own interpretation and selection to musical scores. Avid readers are also usually aware of their own avidness in reading books. Being selected as an avid reader was no surprise to most of them, as they were quite accurate in sensing and expressing their own attitudes toward reading.

As parents and teachers were also asked to describe the personality and behavior of these avid readers, their observations are worth noting. The learning aptitude of most avid readers was strongly indicated, as well as their social and personal adjustment. Avid readers tend to be independent (they would seek activities on their own volition with parental permission). They do not seem competitive, except perhaps for seeking academic prominence.

Parents of the avid readers generally see their children as mature, responsible, and affectionate; but what is more important is the attitude that these parents had about their children. The parents apparently saw their children in very positive ways, and very often supported their children in their children's decisions. Yet the children were usually firmly guided by the parents, limitations and consequences of behavior seemed clearly established, a consistent philosophy of discipline was manifest, and the children were seen as being very obedient to their parents.

The positive attitudes between avid readers and their parents appeared to be reciprocal -- each contributing to a relationship that was usually warm, close, and understanding. Unfortunately, many children from broken homes expressed no strong family ties, and their reading activity seemed a minor event to the family. But for most cases, the parental involvement with the children's activities and interests seemed to act as a catalyst for a growth of a positive self-concept in their children.

F. Behavior

The assessment of the avid readers' personalities and attitudes was reflected in behavior questionnaires completed by teachers, parents and peers. Some of these results have been discussed in the previous section.

Other observations and descriptions referred to specific reading behaviors. Many reading preferences of the avid readers were for fiction books, but nonfiction books were also popular choices. The implication for nonavid readers would be that there may be no one particular style or type of reading material that is solely motivating for young readers. The motive to read must be regarded conjunctly with the availability of reading material, and it appears that the type of material is likely the lesser important of the two. If the will to read is present, then any material commensurate with reading ability may act as a sufficient reading source.

The number of books that the family had at home was not significantly related to the degree of reading avidness in the subjects. Children from homes with many books were as inclined to be avid readers as children from homes of few books.

One finding which has implications for developing a positive attitude toward reading was the early involvement by the parents in their children's reading habits. Avid readers, when they were of preschool ages, were read to rather extensively by their parents and older siblings At bedtime, parents regularly spent 10 to 15 minutes nightly in reading stories, and thus the avid reader's love for reading was seemingly established early.

It is true that other children who also had their parents read to them did not develop any particular avidness in reading; but what characterizes the avid readers further is the tremendous start they had in grade one. Almost every avid reader had a very favorable beginning to the regular school system, which, combined with a keenness to approach reading, would provide some of the circumstances ripe for developing a desire to read.

The first contacts that children have with reading and with learning seem to be fundamental requisites to developing a healthy regard for reading. While it may be too late to re-introduce a disabled reader to reading activities, it may still be worthwhile to present reading as an enjoyable pastime, rather than as a tedious skill to be learned. Remediation in reading might therefore require an emphasis on both the affective as well as cognitive areas.

Children imitate their parents -- they do as their parents do, not say, as the adage states. Social-learning theorists such as A. Bandura would likely postulate that the reading avidness in children is a result of modelling their parents' behaviors. But the parents of avid readers are not always avid readers themselves. Some parents stated that they would infrequently read. However, the parents of the most avid of the readers read more to themselves than the parents of the least avid of the readers. The more a parent reads to himself and displays publicly his interest in reading, the more inclined may be his children to participate in reading activities. Parents who sit quietly in the living room of their home and read silently to themselves may act as models for their children who might also seek to read because of the reinforcement their parents may give them for it.

This finding has unusual implications for remedying a disabled reader. If family involvement in an activity increases the chances that a child will pursue that activity, and if a goal of remedial reading is to increase the time that a reader spends at reading tasks, then a logical conclusion might be to get the whole family involved in the reading behavior of their children. This is not unreasonable, for the Yamaha method of teaching music insists that mothers also take music lessons and learn to play a musical instrument along with their children. So, too, could parents insist that the whole family read for a specific time nightly. In this way, the child may be given familial encouragement and opportunities to experience reading for pleasure.

Two programs are currently used in two elementary schools in Leduc to induce children to read. U. S. S. R. (uninterrupted, silent, sustained reading) and S. T. A. R. (renamed "Stop talking and read!" by some precocious students) are programs wherein thirty minutes is set aside weekly or daily in which everyone (including staff members) must read silently any material they choose. In this manner, the children are forced to read, but they are allowed freedom of choice; and it is hoped that they will extend their reading preferences beyond the confines of this required reading period. It is too early to evaluate the effectiveness of these programs, but the avid readers have already endorsed it with cheery approval.

As indicated earlier, avidness in reading may be just a passing phase for some children. Other children may demonstrate cycles of reading avidness; for example, rural children often read much more in winter than in summer. Other children may reveal an avidness to read in only certain locations; for example, at home but not at school, or in some classes but not in others. Some readers may be avid in reading at some grade levels, yet not at others. Perhaps these types of people would reveal different characteristic patterns than the avid reader who is seldom seen without a book in his entire lifetime. Only a longitudinal study could indicate any differences that these two types of avid readers would show.

It was evident that some of the 36 avid readers could no longer be described as "avid" six months after the initial assessment, while other avid readers had apparently become even more avid in that period. It could be possible that some disabled readers, too, may exhibit a low interest in reading at a particular stage in their lives, but may later express a keenness toward reading. A graphic profile of one's reading avidness would therefore likely show rises and falls over several years.

One unexpected observation was the occurrence of left-handedness in the subjects. Almost one-third wrote with their left hand. Current theories of reading disability emphasize the correlation of mixed dominance with reading difficulty, and left-handedness in particular is commonly associated with a vulnerability toward a reading handicap. But in this study the avid readers exhibit more than their due portion of left-handers. Although Bakan (1970, 1973) has attempted to explain similar cases by hypothesizing that any selection of people based on the extreme ends in a range of criteria tends to yield an unusually high percentage of left-handers, there is still inconclusive evidence to show why this should be the case with avid readers.

Clinicians should be aware of the danger of associating dominance of the left hand with reading disabilities. There would appear to be a case for postulating exactly the opposite -- that left-handedness may be associated with reading competence and avidness, certainly not incompetence.

G. Family Relationships

Throughout the collection of data from the family interviews, it became more clear to the writer of the possibility that the family situation may have more association with reading avidness than was initially thought. In spite of a lack of evidence gathered to substantiate many suppositions made about the role of the family, its importance in developing a reading atmosphere for the children may be considerable.

Probably the single most important determinant of the development of reading avidness in children is the family background. As stated previously, the encouragement that parents give their children seems to be a powerful motivating force. Children do not live in a vacuum -- they exist in a complex interpersonal world where parental influences are critical, especially in the first years of life.

To change children without parental involvement may be very difficult -- like building a sand castle on the beach, only to have it last until the next tide comes in. The crucial role of the family was suggested in the patterns of avid readers described. Special significance may need to be placed upon the family relationships if one is to truly understand the character and development of avid readers.

H. Patterns of Avid Readers

Based upon the evidence collected from the 36 avid readers, five types of avid readers were tentatively identified (and two additional patterns have been proposed). A purpose of this study was to identify these patterns, and a further clarification of them through additional research is still required.

The "gifted" avid readers excel in most undertakings that they attempt. They are good in sports, music, popularity, achievement, crafts; and reading seems to be merely an extension of the fervor with which they are involved in activities.

Finding solace in reading may characterize another group of avid readers who are usually children from broken homes. They may be social outcasts and might have no particular areas in which they excel -- they appear to retreat to the privacy of their own world within a book. Often their only source of consistent pleasure may be found in the happy ending of each story, and they sometimes literally "escape" the chaos of their homes to a quiet corner where reading can offer them "a way to calm me down", in their own words.

Some timid, passive, avid readers might voluntarily withdraw from social situations which they might find uncomfortable to seek companionships in books rather than in people.

The "reward-oriented" avid reader appears to be motivated largely by the gain of material rewards, and thus his avidness in reading may terminate as the rewards also ceased.

Other readers may seek to acquire knowledge through reading and much reading activity might expand their wealth of information, and may satisfy a drive to learn. The reading material of these readers seems almost totally nonfiction.

Students seeking a refuge from boredom may find reading as a last acceptable resort, because these children could have been stifled in some manner in peer relationships, family relationships, and personal activities.

Nothing else seems to offer excitement, but in a situation where other alternative activities were available, these readers might readily abandon their reading preferences.

The "congenial" avid reader is classified as one who seems to strive to please others. He is usually caught between pleasing teachers or pleasing others, and reading may please teachers while yet may not offend his friends. These readers apparently like to be involved with people, and their preferences for reading material often reflect stories that emphasize personal involvement such as in biographies and romance stories.

III. LIMITATIONS

The nature of this study was essentially explorative, and thus norms were not always readily available. Many of the assumptions that the reader may have about avid readers could be verified or repudiated on the evidence gathered thus far.

The traits of avid readers as a group, and the characteristics between patterns of avid readers are applicable to the sample; and other samples of avid readers in grades one, three, and five, or from different geographic locations, may show slight variations. The results may be descriptive of avid readers at the elementary age level, but not necessarily of avid readers at the intermediate, senior, or adult levels.

The study was a focus on avid readers, not competent readers -- although the two traits may be highly correlated.

Also, the avid readers examined were those who showed avidness in continuing to read once they had gained a reading competency, not those children who exhibited a keen desire to learn how to read. These latter types of readers may show somewhat different patterns and traits.

Much of the information gathered was through self-report inventories and by questionnaires completed by teachers, parents, and peers; and was assumed to be valid. Although others testified to the eagerness that these avid readers displayed, the reading behavior of the avid readers was actually not objectively observed by the writer. However, because there was such a broad source of information, verification was easily accomplished.

While there is a fallacy in inferring causation from correlation, some logical speculations might still be made concerning the contributing factors of reading avidness. The major factors are discussed in the following section.

IV. IMPLICATIONS

A. Implications for Teaching and Curriculum

The implications that this study has toward motivating the unmotivated (and often disabled) readers may be cautiously proposed. In presenting these recommendations, it is implied that the traits discussed are considered by the writer to be the major forces of reading avidness, and thus the presence or absence of these traits may subsequently affect the opportunities that a student will have for developing a desire to continue reading.

Initial success in achievement remains a priority. Success at one level can provide encouragement to continue to attempt more difficult material. Even poor readers may possess the capacity for becoming avid readers, and it would be unwise to expect barely minimal performances from poor readers. Jacobson and Rosenthal (see Glock, 1972) have demonstrated the dangers of the teacher's limited expectations of a student's ability, and the teacher should not expect that a poor reader will never become a capable or avid reader.

Although readers of below average intellectual ability may be faced with many difficult circumstances in their reading activities, a lack of a desire to read should not be considered typical of this group; for even the disabled readers of lower intelligence may possess some potential ability, but more important, desire or motivation to read, and that privilege and right should never be denied them.

One should not presume that because an avid reader is exposed to such creative material in books, that the reader himself will be creative. In fact, the reverse is suggested -- that much reading may not be associated with high creativity. It might also follow that introverted/verbally-receptive children perhaps have a better chance of becoming avid readers than extroverted/verbally-expressive children. This assumption is made following the tendency for avid readers to be withdrawn and not too creative, although there are many exceptions.

The self-concepts of avid readers appear vital to the development of their potential in many areas. Not only do avid readers apparently feel good about themselves, but about home and school relationships as well. Encouragement, praise, and understanding seem to remain very important in developing the reader's self-concept as a person, as a competent reader, and as an avid reader.

It is vital that children have a positive initiation to the school system starting in grade one. Here, teachers are aware of the importance of a good beginning school career, but that importance looms larger in the case of avid readers. Perhaps nonavid readers had a poor beginning in grade one, but continued efforts by teachers to foster a positive attitude toward school life might certainly be beneficial.

Thus, teachers should be aware that not all avid readers are good readers, and that care and attention should be taken to encourage reading early in the child's school life, even encouraging those children of seemingly low or average ability who may have potential for becoming highly motivated to read.

B. Implications for Parents

Parental and familial settings may likely be fairly significant in fostering a reading pattern and atmosphere. Avid readers are not overly guided, but appear to have been allowed a broad freedom of choice within guidelines. Conversely, they may have initially been able to regulate their decisions maturely, and thus their parents might allow a broad freedom of choices. They apparently utilize their decision-making abilities, and are active participants in becoming independent. Not merely allowed to develop mature behavior, they may be encouraged and guided by their parents to do so. Nonavid readers may lack such parental guidance, and serious consideration should be given to reading programs involving the whole family, wherein one child's reading problem becomes the concern for the whole family, and perhaps closer personal relationships and building of the reader's self-concept may occur.

The more interest and attention shown by parents to their children's reading habits, the more likely the children may be inclined to pursue those reading activities. Early parental involvement in the form of bedtime stories was universal in the cases of these avid readers. For remedial purposes, the earlier and more intense the parental concern, the better may be the chances for success.

The reading climate instilled by the parents at home should not be under-estimated as being one of the most significant and powerful forces of inducing reading attitudes in children.

C. Implications for Further Research

This research concerns traits of highly-motivated readers, and any comparisons between this group and low-motivated readers must be carefully implied. Wherever possible the performances of the avid readers were compared to those of some norming groups, but the statistical differences between avid and nonavid readers remains to be investigated.

Further research is desirable in many of the areas discussed above. The role of the family toward developing reading avidness was explored, but specific parental practices need elaboration. Other research into the historical and developmental aspects of reading motivation is required, as well as comparative studies examining nonavid readers. A follow-up of avid readers throughout subsequent grades, i.e., a longitudinal study, might identify other patterns of avid readers.

Psychologists sometimes refer patients to books in which they may gain insight into their problems, but this practice of bibliotherapy may be extended to alienated children, who may use stories and books as a source of relaxation, comfort, removal from turmoil, and a chance to regain confidence in their abilities. There is a possibility for research into the therapeutic benefits of reading as a form of bibliotherapy.

V. CONCLUDING STATEMENT

What are the affective, cognitive, social, and behavioral attributes of avid readers? There have not been any other studies (to the writer's knowledge) that attempt to clarify what are the characteristics of reading motivation found in avid readers. This study has not only suggested some major correlates of reading motivation, but has also delineated some patterns for considering avid readers. It can be seen that there is no single profile representing avid readers -- no simple explanation of reading motivation -- but rather, a complex pattern of interrelated traits.

The first year of school, the family background, the person's self-concept, and the reader's personality are offered as some of the more important traits of reading motivation.

We can teach children how to read, but we have not yet mastered the task of "teaching" them to keep on reading. Avid readers may provide some clues to the directions to be examined in pursuing that objective.

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APPENDICES

APPENDIX I

PERSONALITY AND ATTITUDE ASSESSMENT

APPENDIX A

SELF-CONCEPT ASSESSMENT

APPENDIX A_1

THE WAY I FEEL ABOUT MYSELF

(Piers and Harris, 1969)

Here are a set of statements. Some of them are true of you and so you will circle the yes. Some are not true of you and so you will circle the no. Answer every question even if some are hard to decide, but do not circle both yes and no. Remember, circle the yes if the statement is generally like you, or circle the no if the statement is generally not like you. There are no right or wrong answers. Only you can tell us how you feel about yourself, so we hope you will mark the way you really feel inside.

1. My classmates make fun of me. yes no
2. I am a happy person. yes no
3. It is hard for me to make friends. yes no
4. I am often sad. yes no
5. I am smart. yes no
6. I am shy. yes no
7. I get nervous when the teacher calls on me. yes no
8. My looks bother me. yes no
9. When I grow up, I will be an important person. yes no
10. I get worried when we have tests in school. yes no
11. I am unpopular. yes no
12. I am well behaved in school. yes no
13. It is usually my fault when something goes wrong. yes no

14. I cause trouble to my family. yes no
15. I am strong. yes no
16. I have good ideas. yes no
17. I am an important member of my family. yes no
18. I usually want my own way. yes no
19. I am good at making things with my hands. yes no
20. I give up easily. yes no
21. I am good in my school work. yes no
22. I do many bad things. yes no
23. I can draw well. yes no
24. I am good in music. yes no
25. I behave badly at home. yes no
26. I am slow in finishing my school work. yes no
27. I am an important member of my class. yes no
28. I am nervous. yes no
29. I have pretty eyes. yes no
30. I can give a good report in front of the class. yes no
31. In school I am a dreamer. yes no
32. I pick on my brother(s) and sister(s). yes no
33. My friends like my ideas. yes no
34. I often get into trouble. yes no
35. I am obedient at home. yes no
36. I am lucky. yes no
37. I worry a lot. yes no
38. My parents expect too much of me. yes no
39. I like being the way I am. yes no

40. I feel left out of things. yes no
41. I have nice hair. yes no
42. I often volunteer in school. yes no
43. I wish I were different. yes no
44. I sleep well at night. yes no
45. I hate school. yes no
46. I am among the last to be chosen for games. yes no
47. I am sick a lot. yes no
48. I am often mean to other people. yes no
49. My classmates in school think I have good ideas. yes no
50. I am unhappy. yes no
51. I have many friends. yes no
52. I am cheerful. yes no
53. I am dumb about most things. yes no
54. I am good looking. yes no
55. I have lots of pep. yes no
56. I get into a lot of fights. yes no
57. I am popular with boys. yes no
58. People pick on me. yes no
59. My family is disappointed in me. yes no
60. I have a pleasant face. yes no
61. When I try to make something, everything seems to go wrong. yes no
62. I am picked on at home. yes no
63. I am a leader in games and sports. yes no
64. I am clumsy. yes no

65. In games and sports, I watch instead of play. yes no

66. I forget what I learn. yes no

67. I am easy to get along with. yes no

68. I lose my temper easily. yes no

69. I am popular with girls. yes no

70. I am a good reader. yes no

71. I would rather work alone than with a group. yes no

72. I like my brother (sister). yes no

73. I have a good figure. yes no

74. I am often afraid. yes no

75. I am always dropping or breaking things. yes no

76. I can be trusted. yes no

77. I am different from other people. yes no

78. I think bad thoughts. yes no

79. I cry easily. yes no

80. I am a good person. yes no

Score: ________

APPENDIX A_2

MODIFICATIONS OF THE ORIGINAL PIERS AND HARRIS' ITEMS

Item 4: "often" omitted

Item 13: "usually" omitted

Item 18: "usually" omitted

Item 34: "often" omitted

Item 37: "a lot" changed to "about things"

Item 42: "often" omitted

Item 47: "a lot" omitted

Item 48: "often" omitted

Item 55: "pep" changed to "energy"

Item 74: "often afraid" changed to "afraid of something"

Item 75: "always" omitted, and verbs changed tense to "drop" and "break"

APPENDIX A_3

PERKINS (1958) Q-SORT SELF-CONCEPT SCALE

1. I look on the bright side of things.
2. I understand the kind of a person I am.
3. I am a fast runner.
4. I am not neat.
5. I can take a joke on myself.
6. I cannot talk well in front of a group.
7. I join in doing what the group is doing.
8. I am a leader.
9. My clothes are different than the kind other people wear.
10. I do not like to make things.
11. I keep working until my work is finished.
12. I don't like arithmetic.
13. I don't like animals.
14. I get excited and upset easily.
15. Other people want me to tell them what to do.
16. I draw pictures.
17. I am unpopular.
18. I feel money is very important.
19. I am good in my school work.
20. I can jump well.
21. I can't seem to keep my mind on school work.
22. I have nice hair.
23. I am shy.
24. I do not like school.

25. I have poor health.
26. I do not have a good figure.
27. I have lots of energy.
28. I am not a good sport.
29. I have a brother or sister that I don't like.
30. I am good looking.
31. I am hurt by criticism.
32. I cannot throw a ball well.
33. I dress so people will notice me.
34. I like reading.
35. I can take things apart and put them together again.
36. I wear bright colors.
37. My parents let me decide things for myself.
38. I like my parents.
39. I am clumsy.
40. I am weak.
41. I cannot make up my mind.
42. My parents expect too much of me.
43. I get to places on time.
44. I am tall.
45. I do not like active games.
46. I am afraid to take chances.
47. I have confidence in my own abilities.
48. I watch and listen to TV and radio.
49. I take part in class discussions.
50. I am an unhappy person.

APPENDIX A_4

MODIFICATIONS AND OMISSIONS OF PERKINS (1958) SELF-CONCEPT SCALE

A. Items omitted because they were duplicated by other items include:

1, 6, 10, 16, 17, 19, 21, 22, 23, 24, 25, 26, 27, 30, 39, 42, and 50

B. Items omitted because they would have given little relevant information include:

3, 9, 20, 32, 33, 36, 44, and 48

C. Modifications made to some items include:

Item 4: changed to "I am sloppy."
Item 12: changed to "I like doing arithmetic."
Item 13: changed to "I like animals."
Item 14: "at school" was added
Item 28: changed to "I am a good sport."
Item 35: "can" omitted
Item 41: changed to "I can make up my mind."
Item 45: changed to "I like active games."
Item 47: reworded to "I am pretty sure of myself."

APPENDIX A_5

SELF-ESTEEM INVENTORY (Coopersmith, 1967)

Please mark each statement in the following way:

If the statement describes how you usually feel, put a check ( ) in the column, "Like Me".

If the statement does not describe how you usually feel, put a check ( ) in the column, "Unlike Me".

There are no right or wrong answers.

		Like Me	Unlike Me
1.	I spend a lot of time daydreaming.	______	______
2.	I'm pretty sure of myself.	______	______
3.	I often wish I were someone else.	______	______
4.	I'm easy to like.	______	______
5.	My parents and I have a lot of fun together.	______	______
6.	I never worry about anything.	______	______
7.	I find it very hard to talk in front of the class.	______	______
8.	I wish I were younger.	______	______
9.	There are lots of things about myself I'd change if I could.	______	______
10.	I can make up my mind without too much trouble.	______	______
11.	I'm a lot of fun to be with.	______	______
12.	I get upset easily at home.	______	______
13.	I always do the right thing.	______	______

	Like Me	Unlike Me
14. I'm proud of my school work.	______	______
15. Someone always has to tell me what to do.	______	______
16. It takes me a long time to get used to anything new.	______	______
17. I'm often sorry for the things I do.	______	______
18. I'm popular with kids my own age.	______	______
19. My parents usually consider my feelings.	______	______
20. I'm never unhappy.	______	______
21. I'm doing the best work that I can.	______	______
22. I give in very easily.	______	______
23. I can usually take care of myself.	______	______
24. I'm pretty happy.	______	______
25. I would rather play with children younger than me.	______	______
26. My parents expect too much of me.	______	______
27. I like everyone I know.	______	______
28. I like to be called on in class.	______	______
29. I understand myself.	______	______
30. It's pretty tough to be me.	______	______
31. Things are all mixed up in my life.	______	______

	Like Me	Unlike Me
32. Kids usually follow my ideas.	________	________
33. No one pays much attention to me at home.	________	________
34. I never get scolded.	________	________
35. I'm not doing as well in school as I'd like to.	________	________
36. I can make up my mind and stick to it.	________	________
37. I really don't like being a boy--girl.	________	________
38. I have a low opinion of myself.	________	________
39. I don't like to be with other people.	________	________
40. There are many times when I'd like to leave home.	________	________
41. I'm never shy.	________	________
42. I often feel upset in school.	________	________
43. I often feel ashamed of myself.	________	________
44. I'm not as nice looking as some people.	________	________
45. If I have something to say, I usually say it.	________	________
46. Kids pick on me very often.	________	________
47. My parents understand me.	________	________
48. I always tell the truth.	________	________

	Like Me	Unlike Me
49. My teacher makes me feel I'm not good enough.	______	______
50. I don't care what happens to me.	______	______
51. I'm a failure.	______	______
52. I get upset easily when I'm scolded.	______	______
53. Most people are better liked than I am.	______	______
54. I usually feel as if my parents are pushing me.	______	______
55. I always know what to say to people.	______	______
56. I often get discouraged in school.	______	______
57. Things usually don't bother me.	______	______
58. I can't be depended on.	______	______

APPENDIX A_6

MODIFICATIONS AND OMISSIONS OF COOPERSMITH'S (1967)

SELF-ESTEEM INVENTORY

A. Items omitted because they were duplicated by other items include:

1, 2, 3, 4, 6, 7, 9, 10, 11, 14, 15, 18, 19, 20, 22, 24, 26, 29, 30, 32, 41, 42, 44, 46, 52, and 58

B. Modifications made to items by changing them from the negative to the affirmative form include:

Item 34: changed to "I get scolded."

Item 35: changed to "I am doing as well in school as I would like to."

Item 37: changed to "I like being a boy OR I like being a girl."

Item 39: changed to "I like to be with other people."

Item 50: changed to "I care what happens to me."

Item 57: changed to "Things bother me."

C. Other minor modifications include:

Item 13: "always" omitted

Item 17: "often" omitted

Item 23: "usually" omitted

Item 40: "many" omitted

Item 43: "often" omitted

Item 45: "usually" omitted

Item 48: "always omitted

Item 54: "usually" omitted

Item 55: "always" omitted

Item 56: "often" omitted

APPENDIX A_7

CHILDREN'S FORM OF THE MANIFEST ANXIETY SCALE

(Castaneda *et al*, 1956)

1. It is hard for me to keep my mind on anything.
2. I get nervous when someone watches me work.
3. I feel I have to be best in everything.
4. I blush easily.
5. I like everyone I know.
6. I notice my heart beats very fast sometimes.
7. At times I feel like shouting.
8. I wish I could be very far from here.
9. Others seem to do things easier than I can.
10. I would rather win than lose in a game.
11. I am secretly afraid of a lot of things.
12. I feel that others do not like the way I do things.
13. I feel alone even when there are people around me.
14. I have trouble making up my mind.
15. I get nervous when things do not go the right way for me.
16. I worry most of the time.
17. I am always kind.
18. I worry about what my parents will say to me.
19. Often I have trouble getting my breath.
20. I get angry easily.
21. I always have good manners.
22. My hands feel sweaty.

23. I have to go to the toilet more than most people.
24. Other children are happier than I.
25. I worry about what other people think about me.
26. I have trouble swallowing.
27. I have worried about things that did not really make any difference later.
28. My feelings get hurt easily.
29. I worry about doing the right things.
30. I am always good.
31. I worry about what is going to happen.
32. It is hard for me to go to sleep at night.
33. I worry about how well I am doing in school.
34. I am always nice to everyone.
35. My feelings get hurt easily when I am scolded.
36. I tell the truth every single time.
37. I often get lonesome when I am with people.
38. I feel someone will tell me I do things the wrong way.
39. I am afraid of the dark.
40. It is hard for me to keep my mind on my school work.
41. I never get angry.
42. Often I feel sick in my stomach.
43. I worry when I go to bed at night.
44. I often do things I wish I had never done.
45. I get headaches.
46. I often worry about what could happen to my parents.
47. I never say things I shouldn't.
48. I get tired easily.

49. It is good to get high grades in school.

50. I have bad dreams.

51. I am nervous.

52. I never lie.

53. I often worry about something bad happening to me.

APPENDIX A_8

MODIFICATIONS AND OMISSIONS OF THE CHILDREN'S FORM OF THE MANIFEST ANXIETY SCALE (Castaneda *et al*, 1956)

A. Items omitted because they were duplicated by other items include:

5, 14, 16, 17, 32, 35, 36, 40, 41, 51, and 52

B. Modifications were made to the following items:

Item 6: "sometimes" omitted
Item 7: "at times" omitted
Item 19: "often" omitted
Item 21: "always" omitted
Item 30: "always" omitted
Item 34: "always" omitted
Item 37: "often" omitted
Item 42: "often" omitted
Item 44: "often" omitted
Item 46: "often" omitted
Item 47: changed to "I say things I shouldn't."
Item 53: "often" omitted

APPENDIX A_9

SELF-CONCEPT CARDS

1. My classmates make fun of me.
2. I am a happy person.
3. It is hard for me to make friends.
4. I am sad.
5. I am smart.
6. I am shy.
7. I get nervous when the teacher calls on me.
8. My looks bother me.
9. When I grow up, I will be an important person.
10. I get worried when we have tests in school.
11. I am unpopular.
12. I am well behaved in school.
13. It is my fault when something goes wrong.
14. I cause trouble to my family.
15. I am strong.
16. I have good ideas.
17. I am an important member of my family.
18. I want my own way.
19. I am good at making things with my hands.
20. I give up easily.
21. I am good in my school work.
22. I am proud of my school work.
23. I do many bad things.
24. I can draw well.

25. I am good in music.
26. I behave badly at home.
27. I am slow in finishing my school work.
28. I am an important member of my class.
29. I am nervous.
30. I have pretty eyes.
31. I can give a good report in front of the class.
32. I find it hard to talk in front of the class.
33. In school I am a dreamer.
34. I pick on my brother(s) and sister(s).
35. My friends like my ideas.
36. I get into trouble.
37. I am obedient at home.
38. I am lucky.
39. I worry about things.
40. My parents expect too much of me.
41. I like being the way I am.
42. There are lots of things about myself I would change if I could.
43. I feel left out of things.
44. I have nice hair.
45. I volunteer in school.
46. I wish I were someone else.
47. I can sleep well at night.
48. I hate school.
49. I am among the last to be chosen for games.
50. I am sick.

51. I am mean to other people.

52. My classmates in school think I have good ideas.

53. I am unhappy.

54. I have many friends.

55. I am cheerful.

56. I am dumb about most things.

57. I am good looking.

58. I have lots of energy.

59. I get into a lot of fights.

60. I am popular with boys.

61. People pick on me.

62. My family is disappointed in me.

63. I have a pleasant face.

64. When I try to make something, everything seems to go wrong.

65. I am picked on at home.

66. I am a leader in games and sports.

67. I am clumsy.

68. In games and sports, I watch instead of play.

69. I forget what I learn.

70. I am easy to get along with.

71. I lose my temper easily.

72. I am popular with girls.

73. I am a good reader.

74. I would rather work alone than with a group.

75. I like my brother (sister).

76. I have a good figure.

77. I am afraid of something.
78. I am afraid of someone.
79. I seem to drop and break things.
80. I can be trusted.
81. I am different from other people.
82. I think bad thoughts.
83. I cry easily.
84. I am a good person.
85. I understand the kind of person I am.
86. I am sloppy.
87. I can take a joke on myself.
88. I join in doing what the group is doing.
89. I am a leader.
90. I keep working until my work is finished.
91. I like doing arithmetic.
92. I like animals.
93. I get excited and upset easily at school.
94. Other people want me to tell them what to do.
95. Someone has to tell me what to do.
96. I feel money is very important.
97. I am a good sport.
98. I have a brother or sister that I don't like.
99. I am hurt by criticism.
100. I like reading.
101. I take things apart and put them together again.
102. My parents let me decide things for myself.
103. My parents consider my feelings.

104. I like my parents.
105. I am weak.
106. I can make up my mind.
107. I can make up my mind without too much trouble.
108. I get to places on time.
109. I like active games.
110. I am afraid to take chances.
111. I am pretty sure of myself.
112. I take part in class discussions.
113. My parents and I have a lot of fun together.
114. I wish I were younger.
115. I get upset easily at home.
116. I do the right thing.
117. It takes me a long time to get used to anything new.
118. I am sorry for the things I do.
119. I am doing the best work that I can.
120. I can take care of myself.
121. I would rather play with children younger than me.
122. I like everyone I know.
123. I like to be called on in class.
124. Things are all mixed up in my life.
125. No one pays much attention to me at home.
126. I get scolded.
127. I am doing as well in school as I would like to.
128. I can make up my mind and stick to it.
129. I like being a boy OR I like being a girl.
130. I have a low opinion of myself.

131. I like to be with other people.
132. There are times when I would like to leave home.
133. I feel ashamed of myself.
134. If I have something to say, I say it.
135. My parents understand me.
136. I tell the truth.
137. My teacher makes me feel that I am not good enough.
138. I care what happens to me.
139. I am a failure.
140. Most people are better liked than I am.
141. I feel as if my parents are pushing me.
142. I know what to say to people.
143. I get discouraged in school.
144. Things bother me.
145. I am friendly.
146. I am kind.
147. I am honest.
148. I am thoughtful.
149. I am courteous.
150. I am polite.
151. I am helpful.
152. I can do better work than my grades show that I am doing.
153. I can do better work than my teacher thinks I'm doing.
154. I like to read lots of books.

1A. It is hard for me to keep my mind on anything.

2A. I get nervous when someone watches me work.

3A. I feel I have to be best in everything.

4A. I blush easily.

5A. I notice my heart beats very fast.

6A. I feel like shouting.

7A. I wish I could be very far from here.

8A. Others seem to do things easier than I can.

9A. I would rather win than lose in a game.

10A. I am secretly afraid of a lot of things.

11A. I feel that others do not like the way I do things.

12A. I feel alone even when there are people around me.

13A. I get nervous when things do not go the right way for me.

14A. I worry about what my parents will say to me.

15A. I have trouble getting my breath.

16A. I get angry easily.

17A. I have good manners.

18A. My hands feel sweaty.

19A. I have to go to the toilet more than most people.

20A. Other children are happier than I am.

21A. I worry about what other people think about me.

22A. I have trouble swallowing.

23A. I have worried about things that did not really make any difference later.

24A. My feelings get hurt easily.

25A. I worry about doing the right things.

26A. I am good.

27A. I worry about what is going to happen.

28A. I worry about how well I am doing in school.

29A. I am nice to everyone.

30A. I get lonesome even when I am with people.

31A. I feel someone will tell me I do things the wrong way.

32A. I am afraid of the dark.

33A. I feel sick in my stomach.

34A. I worry when I go to bed at night.

35A. I do things I wish I had never done.

36A. I get headaches.

37A. I worry about what could happen to my parents.

38A. [illegible] say things I shouldn't.

39A. I get tired easily.

40A. It is good to get high grades in school.

41A. I have bad dreams.

42A. I worry about something bad happening to me.

43A. I get worried when we have tests.

44A. I worry about passing to the next grade.

45A. I can read out loud without making mistakes.

46A. I feel relaxed when I am in school.

APPENDIX A_{10}

SELF-CONCEPT CARDS CLASSIFICATION

A. Behavior:

positive cards: 12, 101, 108, 149, 150

negative cards: 18, 20, 23, 33, 36, 51, 59, 86, 6A, 38A

B. School-related activities:

positive cards: 21, 22, 24, 25, 28, 31, 45, 73, 90, 91, 100, 112, 123, 127, 154, 40A, 45A, 46A

negative cards: 27, 32, 48, 68, 69, 137, 143, 152, 153

C. Family relations:

positive cards: 17, 37, 75, 102, 103, 104, 113, 125, 135

negative cards: 14, 26, 34, 40, 62, 65, 98, 115, 132, 141

D. Popularity:

positive cards: 35, 52, 54, 60, 66, 70, 72, 88, 89, 94, 122, 131

negative cards: 1, 3, 11, 49, 61, 74, 121, 140

E. Physical status:

positive cards: 19, 30, 44, 57, 58, 63, 76, 109

negative cards: 8, 4A, 5A, 15A, 22A, 36A, 39A

F. Calmness:

positive cards: 47

negative cards: 7, 10, 13, 29, 39, 50, 64, 77, 78, 81, 83, 93, 110, 117, 144, 1A, 2A, 3A, 7A, 10A, 13A, 14A, 18A, 19A, 21A, 23A, 27A, 28A, 32A, 33A, 34A, 35A, 37A, 41A, 42A, 43A, 44A

G. Happiness:

positive cards: 2, 5, 9, 15, 16, 38, 41, 55, 80, 84, 85, 87, 92, 97, 106, 107, 111, 116, 119, 120, 128, 129, 134, 136, 138, 142, 145, 146, 147, 148, 151, 9A, 17A, 26A, 29A

negative cards: 4, 6, 42, 43, 46, 53, 56, 67, 71, 79, 82, 95, 96, 99, 105, 114, 118, 124, 126, 130, 133, 139, 8A, 11A, 12A, 16A, 20A, 24A, 25A, 30A, 31A.

APPENDIX B

ANXIETY ASSESSMENT

APPENDIX B_1

TEST ANXIETY SCALE FOR CHILDREN (Sarason)
et al, 1960)

(The directions are omitted here since they are like any directions for a group test of this type. Answers are in a "yes-no" dichotomy.)

1. Do you worry when the teacher says that she is going to ask you questions to find out how much you know?
2. Do you worry about being promoted, that is, passing from the _____ to the _____ grade at the end of the year?
3. When the teacher asks you to get up in front of the class and read aloud, are you afraid that you are going to make some bad mistakes?
4. When the teacher says that she is going to call upon some boys and girls in the class to do arithmetic problems, do you hope that she will call upon someone else and not on you?
5. Do you sometimes dream at night that you are in school and cannot answer the teacher's questions?
6. When the teacher says that she is going to find out how much you have learned, does your heart begin to beat faster?
7. When the teacher is teaching you about arithmetic, do you feel that other children in the class understand her better than you?
8. When you are in bed at night, do you sometimes worry about how you are going to do in class the next day?
9. When the teacher asks you to write on the blackboard in front of the class, does the hand you write with sometimes shake a little?
10. When the teacher is teaching you about reading, do you feel that other children in class understand her better than you?

11. Do you think you worry more about school than other children?

12. When you are at home and you are thinking about your arithmetic lesson for the next day, do you become afraid that you will get the answers wrong when the teacher calls upon you?

13. If you are sick and miss school, do you worry that you will do more poorly in your schoolwork than other children when you return to school?

14. Do you sometimes dream at night that other boys and girls in your class can do things you cannot do?

15. When you are home and you are thinking about your reading lesson for the next day, do you worry that you will do poorly on the lesson?

16. When the teacher says that she is going to find out how much you have learned, do you get a funny feeling in your stomach?

17. If you did very poorly when the teacher called on you, would you probably feel like crying even though you would try not to cry?

18. Do you sometimes dream at night that the teacher is angry because you do not know your lessons?

In the following questions the word "test" is used. What I mean by "test" is any time the teacher asks you to do something to find out how much you know or how much you have learned. It could be by your writing on paper, or by your speaking aloud, or by your writing on the blackboard. Do you understand what I mean by "test" -- it is any time the teacher asks you to do something to find out how much you know.

19. Are you afraid of school tests?

20. Do you worry a lot before you take a test?

21. Do you worry a lot while you are taking a test?

22. After you have taken a test do you worry about how well you did on the test?

23. Do you sometimes dream at night that you did poorly on a test you had in school that day?

24. When you are taking a test, does the hand you write with shake a little?

25. When the teacher says that she is going to give the class a test, do you become afraid that you will do poorly?

26. When you are taking a hard test, do you forget some things you knew very well before you started taking the test?

27. Do you wish a lot of times that you didn't worry so much about tests?

28. When the teacher says that she is going to give the class a test, do you get a nervous or funny feeling?

29. While you are taking a test do you usually think you are doing poorly?

30. While you are on your way to school, do you sometimes worry that the teacher may give the class a test?

APPENDIX B_2

MODIFIED TEST ANXIETY SCALE FOR CHILDREN

(Feld and Lewis, 1969)

1. Do you feel relaxed when the teacher says that she is going to ask you questions to find out how much you know?

2. Do you feel sure that you will be promoted, that is pass from the 2nd to the 3rd grade at the end of the year?

3. When the teacher asks you to get up in front of the class and read aloud, do you feel sure that you are going to get all the words right?

4. When the teacher says that she is going to call upon some boys and girls to answer arithmetic problems out loud, do you hope that she will call upon you?

5. Do you dream at night a lot of times that you are in school and can give the right answers to the teacher's questions?

6. When the teacher says that she is going to find out how much you have learned, do you feel relaxed and comfortable?

7. When the teacher is teaching you about arithmetic, do you feel that you understand her better than other children in the class?

8. When you are in bed at night, do you usually feel pleased about how good you are going to do in class the next day?

9. When the teacher asks you to write on the blackboard in front of the class, do you write without your hand shaking?

10. When the teacher is teaching you about reading, do you feel that you understand her better than other children in the class?

11. Do you think you worry less about school than other children?

12. When you are at home and you are thinking about your arithmetic work for the next day, do you feel sure that you will get the answers right?

13. If you are sick and miss school, do you think that it will be easy to catch up with the other children when you return to school?

14. Do you dream at night a lot of times that you can do things that other boys and girls in your class cannot do?

15. When you are home and you are thinking about your reading group for the next day, do you feel that you will do good work?

16. When the teacher says that she is going to find out how much you have learned, do you feel relaxed and comfortable?

17. If you did very poorly when the teacher called on you, would you probably feel that it really didn't matter very much?

18. Do you dream at night a lot of times that the teacher is pleased because you know your work?

19. Do you like tests in school?

20. Do you feel relaxed before you take a test?

21. Do you feel relaxed while you are taking a test?

22. After you have taken a test do you soon forget about the test and think about other things?

23. Do you dream at night a lot of times that you did good work on a test you had in school that day?

24. When you are taking a test, do you write without your hand shaking?

25. When the teacher says that she is going to give the class a test, do you usually feel that you will do good work?

26. When you are taking a hard test, do you remember most things you knew very well before you started taking the test?

27. Do you wish a lot of times that you didn't worry so much about tests?

28. When the teacher says that she is going to give the class a test, do you feel relaxed and comfortable?

29. While you are taking a test do you usually think you are doing good work?

30. While you are on your way to school, do you wish a lot of times that the teacher will give a test so you can show her how much you know?

31. When you are at home, do you think about your school work?

32. Do you sometimes dream at night about school?

APPENDIX B_3

MODIFIED TEST ANXIETY SCALE FOR CHILDREN

(Final Version)

1. Do you feel RELAXED or WORRIED when the teacher says that she is going to ask you questions to find out how much you know?

2. Do you worry about passing to the next grade, or do you feel sure that you will pass?
(a) worried (b) relaxed

3. When the teacher asks you to get up in front of the class and read aloud, are you afraid that you are going to make some bad mistakes, or do you feel sure that you are going to get all the words right?
(a) mistakes (b) relaxed

4. When the teacher says that she is going to call upon some boys and girls to answer arithmetic problems out loud, do you hope that she will call upon someone else, or do you hope that she will call upon you?
(a) someone else (b) me

5. Do you dream at night a lot of times about school? If you do, do you dream that you can give the right answers to the teacher's questions, or that you cannot answer the teacher's questions?
(a) right answers (b) cannot answer

6. When the teacher says that she is going to find out how much you have learned, do you feel relaxed and comfortable, or does your heart begin to beat faster?
(a) relaxed (b) heart beats

7. When the teacher is teaching you about arithmetic, do you feel that other children in the class understand her better than you do, or do you feel that you understand her better than do the other children in the class?
(a) other children (b) me

8. When you are in bed at night, do you usually feel pleased about how good you are going to do in class the next day, or do you sometimes worry about how you are going to do?
(a) pleased (b) worried

9. When the teacher asks you to write on the blackboard in front of the class, do you write without your hand shaking, or does your hand sometimes shake a little?
(a) no shaking (b) hand shakes

10. When the teacher is teaching you about reading, do you feel that you understand her better than other children in the class, or do you feel that other children in the class understand her better than you?
(a) me (b) other children

11. Do you think you worry more or less than other children about school?
(a) more (b) less

12. When you are at home and you are thinking about your arithmetic lesson for the next day, do you become afraid that you will get the answers wrong when the teacher calls upon you, or do you feel sure that you will get the answers right?
(a) wrong (b) right

13. If you are sick and miss school, do you think that it will be easy to catch up with the other children when you return to school, or do you worry that you will do more poorly in school because you missed some of it?
(a) catch up (b) do poorly

14. Do you dream a lot of times that you can do things that other boys and girls in your class cannot do, or do you dream that the other boys and girls in your class can do things you cannot do?
(a) I do things (b) they do things

15. When you are home and you are thinking about your reading group for the next day, do you feel that you will do good work, or do you worry that you will do poorly on the lesson?
(a) good work (b) poorly

16. When the teacher says that she is going to find out how much you have learned, do you get a funny feeling in your stomach, or do you feel relaxed and comfortable?
(a) funny feeling (b) relaxed

17. If you did very poorly when the teacher called on you, would you probably feel that it really didn't matter very much, or would you probably feel like crying even though you would try not to cry?
(a) didn't matter (b) cry

18. Do you sometimes dream at night that the teacher is angry because you do not know your lessons, or do you dream that the teacher is pleased because you know your work?
(a) teacher is angry (b) teacher is pleased

In the following questions the word "test" is used. What I mean by "test" is any time the teacher asks you to do something to find out how much you know or how much you have learned. It could be by your writing on paper, or by your speaking aloud, or by your writing on the blackboard. Do you understand what I mean by "test" -- it is any time the teacher asks you to do something to find out how much you know.

19. Are you afraid of school tests, or do you like tests in school?
(a) afraid (b) like tests

20. Do you feel relaxed or do you worry before you take a test?
(a) relaxed (b) worried

21. Do you feel relaxed or do you worry while you take a test?
(a) relaxed (b) worried

22. After you have taken a test do you worry about how well you did on the test, or do you soon forget about the test and think about other things?
(a) worry (b) other things

23. Do you sometimes dream at night that you did poorly on a test you had in school that day, or do you dream that you did good work on a test?
(a) poorly (b) good work

24. When you are taking a test, do you write without your hand shaking, or does the hand you write with shake a little?
(a) no shaking (b) hand shakes

25. When the teacher says that she is going to give the class a test, do you become afraid that you will do poorly, or do you feel relaxed and comfortable?
(a) worried (b) relaxed

26. When you are taking a hard test, do you remember most things you knew very well before you started taking the test, or do you forget some of the things you knew before?
(a) remember (b) forget

27. Do you wish a lot of times that you didn't worry so much about tests?
(a) yes (b) no

28. When the teacher says that she is going to give the class a test, do you feel relaxed and comfortable, or do you get a nervous or funny feeling?
(a) relaxed (b) nervous

29. While you are taking a test, do you usually think you are doing poorly, or do you think you are doing good work?
(a) poorly (b) good work

30. While you are on your way to school, do you sometimes worry that the teacher may give the class a test, or do you wish the teacher will give a test so you can show her how much you know?
(a) test-worry (b) wish for test

APPENDIX C

PERSONALITY ASSESSMENT

APPENDIX C_1

MODIFIED CHILDREN'S PERSONALITY QUESTIONNAIRE, FORM A_1

(Porter et al, 1965), OR

WHAT YOU DO AND WHAT YOU THINK

Read each statement and mark an (x) on the side that fits you better. Some questions will not have the words just the way you want them but mark every one the best you can. You may ask for help if you don't know a word. Just ask me and I will be able to help you. Do not work too long on one question. Mark it and go right on to the next one. MARK EVERY ONE.

Most of the questions have two boxes to choose from but other questions have three boxes. Always look at ALL the boxes and pick just one of them for your answer.

1. When visiting a new building,

   ( ) do you like to have someone show you around
   ( ) do you like to find your own way

2. When a child laughs at you,

   ( ) do you feel badly
   ( ) do you laugh too

3. Do you think you could do well at

   ( ) almost anything
   ( ) just a few things

4. In a game on the playground, do you

   ( ) stand around
   ( ) run a lot

5. Does your mother think that you are

( ) too lively and restless
( ) quiet and calm

6. When you are at school

( ) do you feel nervous
( ) are you happy

7. Do you work

( ) slowly
( ) quickly

8. In your group, who is the leader

( ) someone else is the leader
( ) you are the leader

9. How many friends do you have?

( ) many friends
( ) just a few good friends

10. Do you think you

( ) smile a great deal
( ) do not smile much

11. Usually means the same as

( ) generally
( ) seldom
( ) always

12. Do you sometimes

( ) speak angrily to your parents
( ) think it is wrong to do so

13. Does your teacher think that

( ) you are good at sitting still
( ) you run around too much

14. When your friends argue, do you

( ) join the argument
( ) keep quiet until they finish

15. Foot is to leg as hand is to

( ) wrist
( ) finger
( ) arm

16. When someone is slow

( ) does it bother you
( ) does it not bother you

17. Would you rather

( ) hunt birds
( ) draw pictures of birds

18. Who gets you your own toys?

( ) you buy them yourself
( ) your mother buys them

19. The next number in 7, 5, 3, is

( ) 9
( ) 1
( ) 0

20. In your family, are you

( ) the happy person
( ) the one in trouble

21. Would you rather talk with

( ) your teacher
( ) a good friend

22. If two children were fighting on the playground, would you

( ) let them fight
( ) go and tell the teacher

23. Which one of these does not belong with the others: cold, hot, wet, warm.

( ) warm
( ) cold
( ) wet

24. If people push you in a bus, do you

( ) just smile
( ) get mad

25. Would you like better

( ) to have bears here now
( ) to hear stories about bears

26. Would you rather

( ) work with books in a library
( ) be a General in the Army

27. If Mary's uncle is my father, what relation is Mary's sister to me?

( ) cousin
( ) niece
( ) auntie

28. When you get excited, do people say that

( ) you shout at them
( ) you are patient

29. Which way of doing things is better?

( ) Mother's way of doing things is always better
( ) your own new way is sometimes better

30. Would you rather be

( ) a tap dancer
( ) a soldier

31. Would you rather go to

( ) the movies
( ) a church

32. In your work

( ) are you doing as well as you should
( ) could you do better

33. Which story would you like better?

( ) one about killing Indians
( ) how Indians made clothing

34. ( ) Do loud noises scare you
( ) Do you laugh at them

35. Do you obey the rules

( ) all of the time
( ) only when someone is looking

36. Are your feelings

( ) easily hurt
( ) not easily hurt

37. Would you rather

( ) collect stamps
( ) play football

38. If people wanted you to do something you did not want to do, would you

( ) get angry
( ) just go along

39. If you begin a job and it becomes hard, do you

( ) give up
( ) keep on working

40. Do new teachers

( ) frighten you
( ) do you usually like them

41. Would you rather

( ) ride a bicycle
( ) listen to music

42. Do teachers

( ) scold you
( ) think you are all right

43. When mother calls, do you

( ) wait a while
( ) come right away

44. Are most children

( ) kind to you
( ) sometimes unkind to you

45. Would you rather

( ) read a book
( ) play ball

46. If someone has a new idea, do you

( ) say it is good
( ) wait a while to make sure

47. If you know the answer, do you

( ) raise your hand
( ) wait to be called

48. Are your parents

( ) always ready to hear you talk
( ) sometimes too busy

49. In a play would you rather be a

( ) speed pilot
( ) famous writer

50. If a trick is played on you, do you

( ) laugh
( ) get a little angry

51. Would you like to

( ) go fishing by yourself
( ) play games with children

52. When you say, "I bet I'm right," are you, in the end

( ) right most of the time
( ) wrong most of the time

53. School life is

( ) hard
( ) easy

54. In your school work,

( ) do you often forget
( ) do you feel sure you can remember things

55. If you were a wild animal, would you rather be a

( ) lion
( ) fast horse

56. ( ) Can you do most things well?
( ) Can others do things better?

57. Would you rather

( ) go to school
( ) work at home

58. In dreams

( ) do animals chase you
( ) are dreams nice

59. Are grown-ups

( ) always happy to listen to you
( ) get angry when you talk

60. Can you

( ) easily stand up in class and talk
( ) or do you feel shy

61. Would you rather

( ) read funny (comic) books
( ) do arithmetic

62. When a small thing upsets you, do you

( ) get so mad you want to throw things
( ) keep calm

63. Do you

( ) like to listen to long stories
( ) get tired when listening to long stories

64. Do your plans

( ) often not work
( ) work out well

65. At home, would you

( ) first help wash the dishes
( ) listen to music or TV

66. When you are hurried, do you

( ) still put your clothes away
( ) just leave your clothes

67. Do you

( ) wish school would not be such a bother
( ) think it is all right as it is

68. Do people think that you make

( ) many mistakes
( ) few mistakes

69. When you read,

( ) do you find it hard to keep your mind on it
( ) can you read right on to the end

70. When your mother calls you in the morning, do you

( ) just jump right up
( ) find it hard to wake up

APPENDIX C_1

MODIFIED CHILDREN'S PERSONALITY QUESTIONNAIRE, FORM A_2

(Porter et al, 1965), OR

WHAT YOU DO AND WHAT YOU THINK

1. When you do your school work,

   ( ) do you finish it quickly
   ( ) does it take you too long

2. When you are losing a game do you

   ( ) sometimes give up and save your energy
   ( ) always play harder

3. When you want your friends to accept your plans

   ( ) can you easily persuade them
   ( ) is it difficult to persuade them

4. Do you think that

   ( ) many children do better work than you
   ( ) you are as good as anyone else

5. If the teacher lets another child do a job that you want to do

   ( ) do you feel badly
   ( ) do you soon forget about it

6. Do grown-ups think that you are

   ( ) naughty
   ( ) well-behaved

7. Do you find that

   ( ) other children take advantage of you
   ( ) other children are kind to you

8. Do you make

   ( ) a lot of mistakes
   ( ) just a few mistakes

9. ( ) Do people like your ideas
   ( ) Do people not like your ideas

10. If you got lost,

( ) would you know what to do
( ) would you be scared

11. Collect is the opposite of

( ) spread
( ) gather
( ) save

12. If it is wrong to do something

( ) do you still do it sometimes
( ) do you not do it

13. Would you rather be a

( ) school teacher
( ) great hunter

14. Can you work

( ) where people laugh and talk
( ) would you rather they keep still

15. Listen is to hear, as look is to

( ) walk
( ) notice
( ) see

16. Does the teacher sometimes say that

( ) you are careless and untidy
( ) or does she not say this

17. On a playground, do you

( ) make a lot of noise
( ) play quietly, without so much noise

18. Do you think that you

( ) could learn to fly an airplane
( ) would find it too difficult to do that

19. The next number in 12, 9, 6, __, is

( ) 4
( ) 3
( ) 5

20. If people pester you, do you

( ) just laugh it off
( ) get angry

21. Would you rather

( ) write a book
( ) be the main actor in a play

22. Are you

( ) good at walking a fence or a log
( ) or are others better

23. Which one of these does not belong with the others: swim, run, sit, fly

( ) run
( ) fly
( ) sit

24. In class, do you

( ) sit quietly
( ) like to move about

25. When you get a new game as a present, do you like to

( ) try it first yourself
( ) have someone show you how to play it

26. Would you rather own a

( ) small, friendly dog
( ) big, powerful dog

27. Tom is younger than Bill. Jim is younger than Tom. Who is the oldest?

( ) Bill
( ) Jim
( ) Tom

28. How much are you disappointed?

( ) often
( ) hardly ever

29. If your teacher scolded you badly, would you

( ) cry when you told you mother
( ) just laugh when you told her

30. Would you rather be the

( ) captain of a peaceful ocean liner
( ) captain of a submarine in war

31. If a dog were barking at you, would you

( ) shout, "Shut up!"
( ) say, "He's trying to be a good dog."

32. ( ) Do you forget your troubles quickly
( ) Do you pout for a long time

33. ( ) Can you touch a big bug
( ) or would you dislike to touch one

34. ( ) Do you wish you were better looking
( ) or are you good-looking now

35. Do you

( ) usually go straight home
( ) usually play along the way

36. ( ) Do you have a hard time deciding which games to play
( ) Do you make up your mind quickly

37. Would you rather

( ) go to school
( ) go on a long trip in a car

38. If you were high up on a big rock,

( ) would you be scared
( ) would you like looking around

39. When Christmas presents are under the tree

( ) do you ever try to open them
( ) do you wait

40. ( ) Do you feel afraid of things that might happen to you
( ) are you satisfied with things as they are

41. Would you rather be

( ) an animal doctor
( ) a piano player

42. ( ) Do you have fainting spells
( ) Do you not have fainting spells

43. When your mother is annoyed with you

( ) is it often her fault
( ) do you generally feel that you were wrong

44. ( ) Does you father do things with you
( ) do you not like to bother him when he is busy

45. When you hear a sad story,

( ) do tears come to your eyes
( ) are you not bothered

46. ( ) Do people pay enough attention to you
( ) do you have to do things to make them notice you

47. When children ask for help in an exam, do you

( ) let them do their own work
( ) help them unless the teacher is watching

48. If people ask you to do too many things, do you

( ) find a way to do them
( ) get all mixed up

49. Would you rather be

( ) a space pilot
( ) an artist

50. First thing in the morning,

( ) are you ready for fun
( ) are you still tired and sleepy

51. Would you rather read

( ) short stories
( ) a long book

52. ( ) Do you succeed in most things you try
( ) Do things often go wrong for you

53. If a classmate calls you a bad name, do you

( ) usually fight
( ) pretend you do not care

54. At a loud bang, do you

( ) jump
( ) just look around

55. When others make mistakes, do you

( ) laugh at them
( ) not laugh at them

56. Would you rather be called

( ) clever
( ) nice and kind

57. Would you rather

( ) learn a lesson in school
( ) watch a game

58. When people talk about a place you know well,

( ) do you start telling them about it too
( ) do you keep quiet until they finish

59. Are you good because

( ) you like to be good
( ) you get into trouble if you are bad

60. ( ) Are you getting along well
( ) or do you have many problems

61. Would you rather

( ) have someone else keep your room tidy
( ) or do it yourself

62. If you don't like the food

( ) do you complain
( ) do you eat it anyway

63. Do people like the best

( ) those who are good
( ) those who tell clever jokes

64. ( ) Does your mother say that you talk too much
( ) or are you quiet

65. ( ) Are you happy to stay with younger children
( ) or won't you stay with them

66. If friends borrow your things without asking

( ) is it all right
( ) are you angry

67. Do you like better a teacher who is

( ) easy to get by
( ) strict

68. When a problem is too hard, do you

( ) give it up for a while and forget it
( ) keep working on it

69. When people play a joke on you, do you

( ) get all upset
( ) take it quietly

70. If you were angry,

( ) would you go quietly to your room
( ) would you slam the door as you went

APPENDIX C_2

CALIFORNIA TEST OF PERSONALITY

(Thorpe et al, 1953)

PRIMARY FORM

Section 1A

1. Is it easy for you to play by yourself when you have to? yes no
2. Is it easy for you to talk to your class? yes no
3. Do you feel like crying when you are hurt a little? yes no
4. Do you feel bad when you are blamed for things? yes no
5. Do you usually finish the games you start? yes no
6. Does someone usually help you dress? yes no
7. Can you get the children to bring back your things? yes no
8. Do you need help to eat your meals? yes no

Section 1B

1. Do the children think you can do things well? yes no
2. Do the other children often do nice things for you? yes no
3. Do you have fewer friends than other children? yes no
4. Do most of the boys and girls like you? yes no
5. Do your folks think that you are bright? yes no

6. Can you do things as well as other children? yes no
7. Do people think that other children are better than you? yes no
8. Are most of the children smarter than you? yes no

Section 1C

1. Do your folks sometimes let you buy things? yes no
2. Do you have to tell some people to let you alone? yes no
3. Do you go to enough new places? yes no
4. Do your folks keep you from playing with the children you like? yes no
5. Are you allowed to play the games you like? yes no
6. Are you punished for many things you do? yes no
7. May you do most of the things you like? yes no
8. Do you have to stay at home too much? yes no

Section 1D

1. Do you need to have more friends? yes no
2. Do you feel that people don't like you? yes no
3. Do you have good times with the children at school? yes no
4. Are the children glad to have you in school? yes no
5. Are you lonesome even when you are with people? yes no
6. Do people like to have you around them? yes no

7. Do most of the people you know like you? yes no
8. Do lots of children have more fun at home than you do? yes no

Section 1E

1. Do the boys and girls often try to cheat you? yes no
2. Do you feel very bad when people talk about you? yes no
3. Are most of the boys and girls mean to you? yes no
4. Do you feel bad because people are mean to you? yes no
5. Do many children say things that hurt your feelings? yes no
6. Are many older people so mean that you hate them? yes no
7. Do you often feel so bad that you do not know what to do? yes no
8. Would you rather watch others play than play with them? yes no

Section 1F

1. Do you often wake up because of bad dreams? yes no
2. Is it hard for you to go to sleep at night? yes no
3. Do things often make you cry? yes no
4. Do you catch colds easily? yes no
5. Are you often tired even in the morning? yes no
6. Are you sick much of the time? yes no

7. Do your eyes hurt often? yes no

8. Are you often mad at people without knowing why? yes no

Section 2A

1. Should you mind your folks even when they are wrong? yes no

2. Should you mind your folks even if your friends tell you not to? yes no

3. Is it all right to cry if you cannot have your own way? yes no

4. Should children fight when people do not treat them right? yes no

5. Should a person break a promise that he thinks is unfair? yes no

6. Do children need to ask their folks if they may do things? yes no

7. Do you need to thank everyone who helps you? yes no

8. Is it all right to cheat if no one sees you? yes no

Section 2B

1. Do you talk to the new children at school? yes no

2. Is it hard for you to talk to new people? yes no

3. Does it make you angry when people stop you from doing things? yes no

4. Do you say nice things to children who do better work than you do? yes no

5. Do you sometimes hit other children when you are playing with them? yes no

6. Do you play games with other children even when you don't want to? yes no

7. Do you help new children get used to the school? yes no

8. Is it hard for you to play fair? yes no

Section 2C

1. Do people often make you very angry? yes no

2. Do you have to make a fuss to get people to treat you right? yes no

3. Are people often so bad that you have to be mean to them? yes no

4. Is someone at home so mean that you often get angry? yes no

5. Do you have to watch many people so they won't hurt you? yes no

6. Do the boys and girls often quarrel with you? yes no

7. Do you like to push or scare other children? yes no

8. Do you often tell the other children that you won't do what they ask? yes no

Section 2D

1. Are your folks right when they make you mind? yes no

2. Do you wish you could live in some other home? yes no

3. Are the folks at home always good to you? yes no

4. Is it hard to talk things over with your folks because they don't understand? yes no

5. Is there someone at home who does not like you? yes no

6. Do your folks seem to think that you are nice to them? yes no

7. Do you feel that no one at home loves you? yes no

8. Do your folks seem to think that you are not very smart? yes no

Section 2E

1. Do you often do nice things for the other children in your school? yes no

2. Are there many bad children in your school? yes no

3. Do the boys and girls seem to think that you are nice to them? yes no

4. Do you think that some teachers do not like the children? yes no

5. Would you rather stay home from school if you could? yes no

6. Is it hard to like the children in your school? yes no

7. Do the other boys and girls say that you don't play fair in games? yes no

8. Do the children at school ask you to play games with them? yes no

Section 2F

1. Do you play with some of the children living near your home? yes no
2. Do the people near your home seem to like you? yes no
3. Are the people near your home often mean? yes no
4. Are there people near your home who are not nice? yes no
5. Do you have good times with people who live near you? yes no
6. Are there some mean boys and girls who live near you? yes no
7. Are you asked to play in other people's yards? yes no
8. Do you have more fun near your home than other children do near theirs? yes no

APPENDIX C_2 (CONTINUED)

ELEMENTARY FORM

Section 1A

1. Do you usually keep at your work until it is done? yes no
2. Do you usually apologize when you are wrong? yes no
3. Do you help other boys and girls have a good time at parties? yes no
4. Do you usually believe what other boys and girls tell you? yes no
5. Is it easy for you to recite or talk in class? yes no
6. When you have some free time, do you usually ask your parents or teacher what to do? yes no
7. Do you usually go to bed on time, even when you wish to stay up? yes no
8. Is it hard to do your work when someone blames you for something? yes no
9. Can you often get boys and girls to do what you want them to? yes no
10. Do your parents or teachers usually need to tell you to do your work? yes no
11. If you are a boy, do you talk to new girls? If you are a girl, do you talk to new boys? yes no
12. Would you rather plan your own work than to have someone else plan it for you? yes no

Section 1B

13. Do your friends generally think that your ideas are good? yes no

14. Do people often do nice things for you? yes no

15. Do you wish that your father (or mother) had a better job? yes no

16. Are your friends and classmates usually interested in the things you do? yes no

17. Do your classmates seem to think that you are not a good friend? yes no

18. Do your friends and classmates often want to help you? yes no

19. Are you sometimes cheated when you trade things? yes no

20. Do your classmates and friends usually feel that they know more than you do? yes no

21. Do your folks seem to think that you are doing well? yes no

22. Can you do most of the things you try? yes no

23. Do people often think that you cannot do things very well? yes no

24. Do most of your friends and classmates think you are bright? yes no

Section 1C

25. Do you feel that your folks boss you too much? yes no

26. Are you allowed enough time to play? yes no

27. May you usually bring your friends home when you want to? yes no

28. Do others usually decide to which parties you may go? yes no

29. May you usually do what you want to during your spare time? yes no

30. Are you prevented from doing most of the things you want to? yes no

31. Do your folks often stop you from going around with your friends? yes no

32. Do you have a chance to see many new things? yes no

33. Are you given some spending money? yes no

34. Do your parents stop you from taking short walks with your friends? yes no

35. Are you punished for lots of little things? yes no

36. Do some people try to rule you so much that you don't like it? yes no

Section 1D

37. Do pets and animals make friends with you easily? yes no

38. Are you proud of your school? yes no

39. Do your classmates think you cannot do well in school? yes no

40. Are you as well and strong as most boys and girls? yes no

41. Are your cousins, aunts, uncles, or grandparents as nice as those of most of your friends? yes no

42. Are the members of your family usually good to you? yes no

43. Do you often think that nobody likes you? yes no

44. Do you feel that most of your classmates are glad that you are a member of the class? yes no

45. Do you have just a few friends? yes no

46. Do you often wish you had some other parents? yes no

47. Is it hard to find friends who will keep your secrets? yes no

48. Do the boys and girls usually invite you to their parties? yes no

Section 1E

49. Have people often been so unfair that you gave up? yes no

50. Would you rather stay away from most parties? yes no

51. Does it make you shy to have everyone look at you when you enter a room? yes no

52. Are you often greatly discouraged about many things that are important to you? yes no

53. Do your friends or your work often make you worry? yes no

54. Is your work often so hard that you stop trying? yes no

55. Are people often so unkind or unfair that it makes you feel bad? yes no

56. Do your friends or classmates often say or do things that hurt your feelings? yes no

57. Do people often try to cheat you or do mean things to you? yes no

58. Are you often with people who have so little interest in you that you feel lonesome? yes no

59. Are your studies or your life so dull that you often think about many other things? yes no

60. Are people often mean or unfair to you? yes no

Section 1F

61. Do you often have dizzy spells? yes no

62. Do you often have bad dreams? yes no

63. Do you often bite your fingernails? yes no

64. Do you seem to have more headaches than most children? yes no

65. Is it hard for you to keep from being restless much of the time? yes no

66. Do you often find you are not hungry at meal time? yes no

67. Do you catch cold easily? yes no

68. Do you often feel tired before noon? yes no

69. Do you believe that you have more bad dreams than most of the boys and girls? yes no

70. Do you often feel sick to your stomach? yes no

71. Do you often have sneezing spells? yes no
72. Do your eyes hurt often? yes no

Section 2A

73. Is it all right to cheat in a game when the umpire is not looking? yes no
74. Is it all right to disobey teachers if you think they are not fair to you? yes no
75. Should one return things to people who won't return things they borrow? yes no
76. Is it all right to take things you need if you have no money? yes no
77. Is it necessary to thank those who have helped you? yes no
78. Do children need to obey their fathers or mothers even when their friends tell them not to? yes no
79. If a person finds something, does he have a right to keep it or sell it? yes no
80. Do boys and girls need to do what their teachers say is right? yes no
81. Should boys and girls ask their parents for permission to do things? yes no
82. Should children be nice to people they don't like? yes no
83. Is it all right for children to cry or whine when their parents keep them home from a show? yes no

84. When people get sick or are in trouble, is it usually their own fault? yes no

Section 2B

85. Do you let people know you are right no matter what they say? yes no

86. Do you try games at parties even if you haven't played them before? yes no

87. Do you help new pupils to talk to other children? yes no

88. Does it make you feel angry when you lose in games at parties? yes no

89. Do you usually help other boys and girls have a good time? yes no

90. Is it hard for you to talk to people as soon as you meet them? yes no

91. Do you usually act friendly to people you do not like? yes no

92. Do you often change your plans in order to help people? yes no

93. Do you usually forget the names of people you meet? yes no

94. Do the boys and girls seem to think you are nice to them? yes no

95. Do you usually keep from showing your temper when you are angry? yes no

96. Do you talk to new children at school? yes no

Section 2C

97. Do you like to scare or push smaller boys and girls? yes no

98. Have unfair people often said that you made trouble for them? yes no

99. Do you often make friends or classmates do things they don't want to? yes no

100. Is it hard to make people remember how well you can do things? yes no

101. Do people often act so mean that you have to be nasty to them? yes no

102. Do you often have to make a "fuss" or "act up" to get what you deserve? yes no

103. Is anyone at school so mean that you tear, or cut, or break things? yes no

104. Are people often so unfair that you lose your temper? yes no

105. Is someone at home so mean that you often have to quarrel? yes no

106. Do you sometimes need something so much that it is all right to take it? yes no

107. Do classmates often quarrel with you? yes no

108. Do people often ask you to do such hard or foolish things that you won't do them? yes no

Section 2D

109. Do your folks seem to think that you are just as good as they are? yes no

110. Do you have a hard time because it seems that your folks hardly ever have enough money? yes no

111. Are you unhappy because your folks do not care about the things you like? yes no

112. When your folks make you mind are they usually nice to you about it? yes no

113. Do your folks often claim that you are not as nice to them as you should be? yes no

114. Do you like both of your parents about the same? yes no

115. Do you feel that your folks fuss at you instead of helping you? yes no

116. Do you sometimes feel like running away from home? yes no

117. Do you try to keep boys and girls away from your home because it isn't as nice as theirs? yes no

118. Does it seem to you that your folks at home often treat you mean? yes no

119. Do you feel that no one at home loves you? yes no

120. Do you feel that too many people at home try to boss you? yes no

Section 2E

121. Do you think that the boys and girls at school like you as well as they should? yes no

122. Do you think that the children would be happier if the teacher were not so strict? yes no

123. Is it fun to do nice things for some of the other boys and girls? yes no

124. Is school work so hard that you are afraid you will fail? yes no

125. Do your schoolmates seem to think that you are nice to them? yes no

126. Does it seem to you that some of the teachers "have it in for" pupils? yes no

127. Do many of the children get along with the teacher much better than you do? yes no

128. Would you like to stay home from school a lot if it were right to do so? yes no

129. Are most of the boys and girls at school so bad that you try to stay away from them? yes no

130. Have you found that some of the teachers do not like to be with the boys and girls? yes no

131. Do many of the other boys or girls claim that they play games more fairly than you do? yes no

132. Are the boys and girls at school usually nice to you? yes no

Section 2F

133. Do you visit many of the interesting places near where you live? yes no

134. Do you think there are too few interesting places near your home? yes no

135. Do you sometimes do things to make the place in which you live look nicer? yes no

136. Do you ever help clean up things near your home? yes no

137. Do you take good care of your own pets or help with other people's pets? yes no

138. Do you sometimes help other people? yes no

139. Do you try to get your friends to obey the laws? yes no

140. Do you help children keep away from places where they might get sick? yes no

141. Do you dislike many of the people who live near your home? yes no

142. Is it all right to do what you please if the police are not around? yes no

143. Does it make you glad to see the people living near you get along fine? yes no

144. Would you like to have things look better around your home? yes no

APPENDIX C_3

MODIFICATIONS OF THE CALIFORNIA TEST OF PERSONALITY

(Thorpe *et al*, 1953)

PRIMARY FORM

Section 1B: Item 5: "folks" changed to "parents"

Section 1C: Item 1: "folks" changed to "parents"
Item 2: "let" changed to "leave"
Item 4: "folks" changed to "parents"

Section 2A: Item 1: item changed to "Should you listen to your parents even when they are wrong?"
Item 2: "mind" changed to "listen to", and "folks" changed to "parents"
Item 6: "folks" changed to "parents"

Section 2D: Item 1: "folks" changed to "parents", and "mind" changed to "listen to them"
Item 3: "folks" changed to "parents"
Item 4: "folks" changed to "parents"
Item 6: "folks" changed to "parents"
Item 8: "folks" changed to "parents"

ELEMENTARY FORM

Item 21: "folks" changed to "parents"
Item 24: "bright" changed to "smart"

Item 25: "folks" changed to "parents"

Item 31: "folks" changed to "parents"

Item 34: "folks" changed to "parents"

Item 59: "Are your studies . . . " changed to "Is your schoolwork . . . "

Item 109: "folks" changed to "parents"

Item 110: "folks" changed to "parents"

Item 111: "folks" changed to "parents"

Item 112: "folks" changed to "parents" and "mind" changed to "listen to them"

Item 113: "folks" changed to "parents"

Item 115: "folks" changed to "parents"

Item 118: "folks" changed to "parents", and "at home" omitted

APPENDIX D

ATTITUDE ASSESSMENT

APPENDIX D_1

ATTITUDES TOWARD READING

1. What do you like to do best at home?

2. What do you like to do best at school?

3. What are some things you know a lot about?

4. How did you find out about these things?

5. What are some things you would like to find out more about?

6. How can you find out more about these things?

7. What do you think is the most important thing to learn to do in school?

8. What does reading mean to you?

9. What kind of stories do you like best?

10. How often do you look at books at home?

11. How often do you look at books when you have free time at school?

12. How many books, magazines, and newspapers does your family have at home?

13. How many books and magazines do you have?

14. How often do your parents take out books from the Leduc (or Edmonton) library?

15. How many books do they take out from the Leduc (or Edmonton) library?

16. How often do you take out books from the Leduc (or Edmonton) library?

17. How many books do you take out from the Leduc (or Edmonton) library?

18. How often do you take out books from the school library?

19. How many books do you take out from the school library?

20. Did anyone in your family used to read to you when you were younger?

21. Does anyone in your family read to you now?

22. How often did/does someone read to you?

23. How often does your mother read to herself?

24. Does your mother like to read?
25. Is your mother a good reader?
26. Why do you like to read books?

27. Does your father like to read?
28. How often does your father read to himself?

29. Is your father a good reader?
30. Does your mother want you to read?
31. Does your father want you to read?
32. How do you think you are doing in school as compared with your friends?
    (a) you are the best
    (b) you are above average
    (c) you are average
    (d) you are below average
    (e) you are the poorest
33. How do you think you are doing in reading as compared with your classmates?
    (a) you are the best
    (b) you are above average
    (c) you are average

(d) you are below average

(e) you are the poorest

34. How many books and magazines do you read as compared with your friends?

(a) you read many more books and magazines than they do

(b) you read a few more books and magazines than they do

(c) you read as many books and magazines as they do

(d) you read fewer books and magazines than they do

35. How important is reading to you?

(a) very important

(b) a little important

(c) not too important

(d) not important at all

36. How important is it to you to get good grades in school?

(a) very important

(b) a little important

(c) not too important

(d) not important at all

37. Which sentence best describes you?

(a) I like to get better grades than everyone else.

(b) I like to get better grades than almost everyone else

(c) I like to get about the same grades as everyone else

(d) I don't care about my particular grades

38. Do you think that you have good enough grades to get through junior high and senior high school?

APPENDIX D_2

INITIAL INTERVIEW

"Hello __________. My name is Dennis Cebuliak. I'm from the University, and I'm doing a study on what children think about different things. Would you like to help in this?"

1. Do you like answering questions? YES NO
2. What would you like to be when you grow up?
3. Do you like reading? YES NO
4. What kinds of books do you read?
5. What kinds of magazines do you read?
6. Can you tell me the names of some books and magazines that you have read in the last two weeks?
7. Where do you get your books and magazines from?
8. How many books and magazines have you read in the last two weeks?
9. Do you like reading books during the summer holidays? How many books do you think you read over the last summer holidays? How many books do you think you will read over the summer holidays coming up?
10. Are you able to stay after school on some days so that I can ask you more about what you think about different things? Which days would be best for you?

Are you also able to come to the University on Saturday, or during the holidays if I drive you?

11. I have already written to your parents asking their permission to see you, and I think I'll be able to give you a little money (not very much) at the end of our study.

APPENDIX II

MOTIVATION ASSESSMENT

APPENDIX E_1

"MEASURE OF INTELLECTUAL ACADEMIC ATTAINMENT VALUE" (Crandall, 1969), OR

WHAT I WOULD LIKE TO DO BEST

If you could do anything you wanted to, what would you do?

Which of these would you rather be able to do?

1. (a) Be able to understand new ideas, or
   (b) Be the leader of your friends?
2. (a) Be able to do well in your school work, or
   (b) Have lots of kids like you?
3. (a) Have other people do what you want them to, or
   (b) Be able to understand new ideas?
4. (a) Have all your clothes, chairs, and beds be comfortable, or
   (b) Be able to do well in your school work?
5. (a) Always have your friends want you to play with them, or
   (b) Be able to understand new ideas?
6. (a) Be able to do well in your school work, or
   (b) Be the leader of your friends?
7. (a) Have someone you can talk over your troubles with, or
   (b) Be able to understand new ideas?

8. (a) Be able to do well in your school work, or
   (b) Have good things to eat?

9. (a) Have other people do what you want them to, or
   (b) Be able to do well in your school work?

10. (a) Have lots of kids like you, or
    (b) Be able to understand new ideas?

11. (a) Be able to do well in your school work, or
    (b) Always have your friends want you to play with them?

12. (a) Have all your clothes, chairs, and beds be comfortable, or
    (b) Be able to understand new ideas?

13. (a) Always have someone who can help you when you need help, or
    (b) Be able to do well in your school work?

14. (a) Be able to understand new ideas, or
    (b) Have good things to eat?

15. (a) Have someone you can talk over your troubles with, or
    (b) Be able to do well in your school work?

16. (a) Be able to understand new ideas, or
    (b) Always have someone who can help you when you need help?

APPENDIX E_2

SCHOOL MOTIVATION ANALYSIS TEST

(Sweney and Cattell, 1966), OR MOTIVATION QUESTIONNAIRE

This is a questionnaire which is asking you about how much you would like certain things. All you have to do is to read each sentence, and then circle the word which tells how much you would like to do what the sentence says. For example, one sentence may say:

I want to go on more hikes.

very much quite a lot not too much not at all

If you really wanted to go on more hikes, you would circle very much; but if you kind of wanted to go on more hikes, but not lots of hikes, you would circle quite a lot or not too much, depending on how badly you did or didn't want to go on hikes. But if you never want to go on any more hikes, you would circle not at all. Have you got the directions straight? OK, let's go.

1. I like to eat well so that I shall grow healthy and strong:
   very much quite a lot not too much not at all
2. I like to see a handsome or pretty face in the mirror:
   very much quite a lot not too much not at all
3. I want to be the kind of person everyone like to have around:
   very much quite a lot not too much not at all

4. I want to have a good reputation for ideals and honesty:

very much quite a lot not too much not at all

5. I want to grow up normally and never become sick:

very much quite a lot not too much not at all

6. I like to imagine that I am grown up:

very much quite a lot not too much not at all

7. I want never to do anything that would damage my self-respect:

very much quite a lot not too much not at all

8. I want always to show self-control:

very much quite a lot not too much not at all

9. I sometimes want to play practical jokes on Father:

very much quite a lot not too much not at all

10. I want to hear Father tell funny stories:

very much quite a lot not too much not at all

11. I want to show my father how great and admirable I think he is:

very much quite a lot not too much not at all

12. I want to have Mother there if something goes wrong:

very much quite a lot not too much not at all

13. I want Mother to make good cookies and candies for me to eat:

very much quite a lot not too much not at all

14. I want to marry someone like my (father) (mother) when I grow up:

very much quite a lot not too much not at all

15. I want my older brothers and sisters to be punished when they need it:
very much quite a lot not too much not at all

16. I want to spend more time with my brothers and sisters:
very much quite a lot not too much not at all

17. I want my younger brothers and sisters to behave and listen to me:
very much quite a lot not too much not at all

18. I want to be safe at home when the weather is bad:
very much quite a lot not too much not at all

19. I want to go home and rest after a busy day:
very much quite a lot not too much not at all

20. I want to write paragraphs correctly:
very much quite a lot not too much not at all

21. I want to pretend that I am in other countries when I study geography:
very much quite a lot not too much not at all

22. I want to learn more about science:
very much quite a lot not too much not at all

23. I want to get good grades in arithmetic:
very much quite a lot not too much not at all

24. I like to listen to records:
very much quite a lot not too much not at all

25. I want to make things and draw pictures for school:
very much quite a lot not too much not at all

26. I want my pictures to be beautiful and pleasant to look at:

very much quite a lot not too much not at all

27. I want to read about the world:

very much quite a lot not too much not at all

28. I want to read fairy tales and other fanciful stories:

very much quite a lot not too much not at all

29. I want to read funny comics and funny stories:

very much quite a lot not too much not at all

30. I want my teacher to be fair:

very much quite a lot not too much not at all

31. I want my teacher to like me:

very much quite a lot not too much not at all

32. I want to spend more time with my friends:

very much quite a lot not too much not at all

33. I want to get even with other kids who have caused me trouble:

very much quite a lot not too much not at all

34. I want to read more books than my friends:

very much quite a lot not too much not at all

35. I want Canada to protect small countries from Russia:

very much quite a lot not too much not at all

36. I want to go to parties where both girls and boys are invited:

very much quite a lot not too much not at all

37. I want Canada to beat its enemies:

very much quite a lot not too much not at all

38. I want to worship God and obey Him:

very much quite a lot not too much not at all

39. I want to pray for God's protection and mercy:

very much quite a lot not too much not at all

40. I want my team to win:

very much quite a lot not too much not at all

41. I want to go to games with my friends:

very much quite a lot not too much not at all

42. I want to have a pet to take care of:

very much quite a lot not too much not at all

43. I want to learn to make things in the scouts or girl guides:

very much quite a lot not too much not at all

44. I want to save money in the bank:

very much quite a lot not too much not at all

45. I want to see or hear comedians on TV, movies, and the radio:

very much quite a lot not too much not at all

46. I want to hear and see more westerns and adventure stories:

very much quite a lot not too much not at all

47. I want to see more romantic movies:

very much quite a lot not too much not at all

48. I want to see more science fiction movies and TV programs:

very much quite a lot not too much not at all

49. I want to have plenty of games, books and other games:

very much quite a lot not too much not at all

50. I want to have a better collection than anyone else:

very much quite a lot not too much not at all

51. I want nice clothes so that people will like the way I look:

very much quite a lot not too much not at all

52. I want to dress well in order to impress other boys (or other girls):

very much quite a lot not too much not at all

53. I want to help the family by holding a job when I finish school:

very much quite a lot not too much not at all

54. I want to learn how to do jobs like my mother and father:

very much quite a lot not too much not at all

55. I want to go on more picnics:

very much quite a lot not too much not at all

56. I want to have more holidays in order to rest:

very much quite a lot not too much not at all

57. I want to go on parties and enjoy refreshments:

very much quite a lot not too much not at all

58. I want to solve puzzles or other games:

very much quite a lot not too much not at all

59. I want to be polite to adults:

very much quite a lot not too much not at all

60. I want to take things apart to see what makes them work:

very much quite a lot not too much not at all

APPENDIX E_3

MODIFICATIONS OF *THE SMAT* (Sweney and Cattell, 1966)

Item 2: "figure" changed to "face"

Item 11: "awesome" changed to "great"

Item 13: "goodies" changed to "cookies and candies"

Item 17: "mind me" changed to "listen to me"

Item 24: "hear" changed to "listen to"

Item 34: replaced with "I want to read more books than my friends."

Item 35: "United States" changed to "Canada"

Item 36: "couples" changed to "both girls and boys"

Item 37: "United States" changed to "Canada"

Item 43: "or girl guides" was added

Item 47: "love pictures" changed to "romantic movies"

Item 52: "the opposite sex" changed to "other boys (or other girls)"

Item 53: "when I finish school" was added

Item 58: "high in curiosity" was omitted

APPENDIX III

BEHAVIORAL OBSERVATION

APPENDIX F

TEACHER SOURCE

APPENDIX F_1

TEACHER RATING SCALE FOR PUPIL ADJUSTMENT

(Andrew *et al*, 1953), OR

TEACHER'S EVALUATION OF STUDENT'S BEHAVIOR

Please check off one choice for each of the following items:

1. Overall emotional adjustment (total emotional adequacy in meeting the daily problems of living as manifested in school).

( ) very well adjusted
( ) well adjusted
( ) moderately adequate adjustment
( ) poorly adjusted
( ) very poorly adjusted

2. Social maturity (ability to deal with social responsibilities in school, in the community, and at home, appropriate to his age).

( ) very superior social maturity
( ) slightly superior social maturity
( ) average social maturity
( ) slightly inferior social maturity
( ) very inferior social maturity

3. Tendency towards depression (tendency towards melancholy, depressed mood reaction).

( ) generally very happy
( ) moderately happy
( ) occasionally unhappy
( ) tendency towards depression
( ) generally depressed

4. Tendency towards aggressive behavior (overt evidence of hostility and/or aggression towards other children and/or adults).

   ( ) rarely aggressive
   ( ) occasionally aggressive
   ( ) fairly aggressive
   ( ) frequently aggressive
   ( ) extremely aggressive

5. Extroversion-Introversion (tendency towards living outwardly and expressing his emotions spontaneously versus tendency towards living inwardly and keeping emotions to himself).

   ( ) extremely extroverted
   ( ) characteristically extroverted
   ( ) about equally extroverted and introverted
   ( ) characteristically introverted
   ( ) extremely introverted

6. Emotional security (feeling of being accepted by and friendly towards one's environment).

   ( ) extremely secure
   ( ) moderately secure
   ( ) only fairly secure
   ( ) moderately insecure and apprehensive
   ( ) extremely insecure and apprehensive

7. Motor control and stability (capacity for effective coordination and control of motor activity of the entire body).

   ( ) extremely good motor control and stability
   ( ) moderately good motor control and stability
   ( ) fair motor control and stability
   ( ) moderately poor motor control and stability -- restless, hyperkinetic
   ( ) extremely poor motor control -- restless, hyperkinetic

8. Impulsiveness (tendency towards sudden or marked changes of mood).

   ( ) extremely stable in mood
   ( ) stable in mood
   ( ) usually stable -- only infrequent and minor mood changes
   ( ) unstable in mood -- shows marked mood changes on occasion
   ( ) extreme changes in mood -- shows marked or sudden mood changes frequently

9. Emotional irritability (tendency to become angry, irritated or upset).

   ( ) unusually good natured
   ( ) good natured -- rarely "irritable"
   ( ) fairly good natured -- occasionally "irritable"
   ( ) moderately "irritable" -- frequently shows moderate "irritation"
   ( ) extremely "irritable" -- frequently shows marked "irritability"

10. School achievement (overall evaluation of pupil's competency in school subjects, relative to his own age group).

   ( ) very superior -- excellent
   ( ) slightly superior -- very good
   ( ) average -- good
   ( ) slightly inferior -- fair
   ( ) inferior -- poor

11. School conduct (conduct in the classroom situation as evidence of his ability to accept the rules and regulations of the school community).

   ( ) exceptionally good conduct
   ( ) superior conduct

( ) average conduct
( ) somewhat inadequate conduct -- troublesome disciplinary problem
( ) very inadequate conduct -- very serious disciplinary problem

APPENDIX F_2

SCALE FOR RATING BEHAVIORAL CHARACTERISTICS OF SUPERIOR STUDENTS (Renzulli and Hartman, 1971)

Directions: These scales are designed to obtain teacher estimates of a student's characteristics in the areas of learning, motivation, creativity, and leadership. The items are derived from the research literature dealing with characteristics of gifted and creative persons. It should be pointed out that a considerable amount of individual differences can be found within this population; and therefore, the profiles are likely to vary a great deal. Each item in the scales should be considered separately and should reflect the degree to which you have observed the presence or absence of each characteristic. Since the four dimensions of the instrument represent relatively different sets of behaviors, the scores obtained from the separate scales should not be summed to yield a total score. Please read the statements carefully and place an X in the appropriate place according to the following scale of values:

1 -- If you have seldom or never observed this characteristic.

2 -- If you have observed this characteristic occasionally.

3 -- If you have observed this characteristic to a considerable degree.

4 -- If you have observed this characteristic almost all of the time.

(Scoring procedures are omitted here)

Part I: Learning Characteristics

1 2 3 4

1. Has unusually advanced vocabulary for age or grade level; uses terms in a meaningful way; has verbal behavior characterized by "richness" of expression, elaboration, and fluency. ___ ___ ___ ___

2. Possesses a large storehouse of information about a variety of topics (beyond the usual interests of youngsters his age). ___ ___ ___ ___

1 2 3 4

3. Has quick mastery and recall of factual information. ___ ___ ___ ___

4. Has rapid insight into cause-effect relationships; tries to discover the how and why of things; asks many provocative questions (as distinct from informational or factual questions; wants to know what makes things (or people) "tick". ___ ___ ___ ___

5. Has a ready grasp of underlying principles and can quickly make valid generalizations about events, people, or things; looks for similarities and differences in events, people, and things. ___ ___ ___ ___

6. Is a keen and alert observer; usually "sees more" or "gets more" out of a story, film, etc. than others. ___ ___ ___ ___

7. Reads a great deal on his own; usually prefers adult level books; does not avoid difficult material; may show a preference for biography, autobiography, encyclopedias, and atlases. ___ ___ ___ ___

8. Tries to understand complicated material by separating it into its respective parts; reasons things out for himself; sees logical and common sense answers. ___ ___ ___ ___

Part II: Motivational Characteristics

1. Becomes absorbed and truly involved in certain topics or problems; is persistent in seeking task completion. (It is sometimes difficult to get him to move on to another topic). ___ ___ ___ ___

2. Is easily bored with routine tasks. ___ ___ ___ ___

3. Needs little external motivation to follow through in work that initially excites him. ___ ___ ___ ___

4. Strives toward perfection; is self critical; is not easily satisfied with his own speed or products. ___ ___ ___ ___

	1	2	3	4
5. Prefers to work independently; requires little direction from teachers.	___	___	___	___
6. Is interested in many "adult" problems such as religion, politics, sex, race -- more than usual for age level.	___	___	___	___
7. Often is self assertive (sometimes even aggressive); stubborn in his beliefs.	___	___	___	___
8. Likes to organize and bring structure to things, people, and situations.	___	___	___	___
9. Is quite concerned with right and wrong, good and bad, often evaluates and passes judgment on events, people and things.	___	___	___	___

Part III: Creativity Characteristics

1. Displays a great deal of curiosity about many things; is constantly asking questions about anything and everything.	___	___	___	___
2. Generates a large number of ideas or solutions to problems and questions; often offers unusual ("way out"), unique, clever responses.	___	___	___	___
3. Is uninhibited in expressions of opinion; is sometimes radical and spirited in disagreement; is tenacious.	___	___	___	___
4. Is a high risk taker; is adventurous and speculative.	___	___	___	___
5. Displays a good deal of intellectual playfulness; fantasizes; imagines ("I wonder what would happen if . . . . "); manipulates ideas (i.e., changes, elaborates upon them); is often concerned with adapting, improving, and modifying institutions, objects and systems.	___	___	___	___
6. Displays a keen sense of humor and sees humor in situations that may not appear to be humorous to others.	___	___	___	___

7. Is usually aware of his impulses and more open to the irrational in himself (freer

1 2 3 4

expression of feminine interest for boys, greater than usual amount of independence for girls); shows emotional sensitivity. ___ ___ ___ ___

8. Is sensitive to beauty; attends to aesthetic characteristics of things. ___ ___ ___ ___

9. Is nonconforming; accepts disorder; is not interested in details; is individualistic; does not fear being different. ___ ___ ___ ___

10. Criticizes constructively; is unwilling to accept authoritarian pronouncements without critical examination. ___ ___ ___ ___

Part IV: Leadership Characteristics

1. Carries responsibility well; can be counted on to do what he has promised and usually does it well. ___ ___ ___ ___

2. Is self confident with children his own age as well as adults; seems comfortable when asked to show his work to the class. ___ ___ ___ ___

3. Seems to be well liked by his classmates. ___ ___ ___ ___

4. Is cooperative with teacher and classmates; tends to avoid bickering and is generally easy to get along with. ___ ___ ___ ___

5. Can express himself well; has good verbal facility and is usually well understood. ___ ___ ___ ___

6. Adapts readily to new situations; is flexible in thought and action and does not seem disturbed when the normal routine is changed. ___ ___ ___ ___

7. Seems to enjoy being around other people; is sociable and prefers not to be alone. ___ ___ ___ ___

8. Tends to dominate others when they are around; generally directs the activity in which he is involved. ___ ___ ___ ___

1 2 3 4

9. Participates in most social activities connected with the school; can be counted on to be there if anyone is. — — — —

10. Excels in athletic activities; is well coordinated and enjoys all sorts of athletic games. — — — —

APPENDIX F$_3$

AN ATTITUDE SCALE FOR READING (Rowell, 1972)

Directions: Check the most appropriate of the five blanks by each item below. Only one blank by each item should be checked.

	Always Occurs	Often Occurs	Occasionally Occurs	Seldom Occurs	Never Occurs
1. The student exhibits a strong desire to come to the reading circle or to have reading instruction take place.	___	___	___	___	___
2. The student is enthusiastic and interested in participating once he comes to the reading circle or the reading class begins.	___	___	___	___	___
3. The student asks permission or raises his hand to read orally.	___	___	___	___	___
4. When called upon to read orally the student eagerly does so.	___	___	___	___	___
5. The student very willingly answers a question asked him in the reading class.	___	___	___	___	___
6. Contributions in the way of voluntary discussions are made by the student in the reading class.	___	___	___	___	___
7. The student expresses a desire to be read to by you or someone else, and he attentively listens while this is taking place.	___	___	___	___	___
8. The student makes an effort to read printed materials on bulletin boards, charts, or other displays having writing on them.	___	___	___	___	___

		Always Occurs	Often Occurs	Occasionally Occurs	Seldom Occurs	Never Occurs
9.	The student elects to read a book when the class has permission to choose a "free-time" activity.	___	___	___	___	___
10.	The student expresses genuine interest in going to the school's library.	___	___	___	___	___
11.	The student discusses with you (the teacher) or members of the class those items he has read from the newspaper, magazines, or similar materials.	___	___	___	___	___
12.	The student voluntarily and enthusiastically discusses with others the book he has read or is reading.	___	___	___	___	___
13.	The student listens attentively while other students share their reading experiences with the group.	___	___	___	___	___
14.	The student expresses eagerness to read printed materials in the content areas.	___	___	___	___	___
15.	The student goes beyond the textbook or usual reading assignment in searching for other materials to read.	___	___	___	___	___
16.	The student contributes to group discussions that are based on reading assignments made in the content areas.	___	___	___	___	___

APPENDIX F_4

TEACHER INTERVIEW

1. How many books would you say __________ has read within the past two weeks?

2. What characterizes ____________ beside the fact that he/she reads books? What other things about him/her make him/her outstanding?

The following statements offer descriptions about students. Please reflect upon how the statement is characteristic of the student, in terms of how often the statement would apply to him or her. Please respond by writing in 1, 2, 3, 4, 5, or 6, depending upon how often you observe the trait in the student. For example, if you seldom notice that the student asks for teacher assistance, you would write in _2_ in the space provided.

1	Never	4	To a considerable degree
2	Seldom	5	Almost all of the time
3	Occasionally	6	Absolutely all of the time

1. Has an unusually advanced vocabulary for age or grade level; uses terms in meaningful ways; has verbal behavior characterized by "richness" of expression, elaboration, and fluency. ____(1)

2. Possesses a large storehouse of information about a variety of topics (beyond the usual interests of youngsters of his age). ____(2)

3. Has quick mastery and recall of factual information. ____(3)

4. Has rapid insight into cause-effect relationships; ____(4a)

   tries to discover the how and why of things; ____(4b)

   asks many provocative questions (as distinct from informational or factual questions); ____(4c)

   wants to know what makes things (or people) "tick"; ____(4d)

5. Has a ready grasp of underlying principles and can quickly make valid generalizations about events, people, and things. ____(5)

6. Is a keen and alert observer; usually "sees more" or "gets more" out of a story, film, etc. than others. ____(6)

7. Reads a great deal on his own; ____(7a)

   usually prefers adult level books (does not avoid difficult material); ____(7b)

   may show a preference for biography, autobiography, encyclopedias, and atlases; ____(7c)

8. Tries to understand complicated material by separating it into its respective parts; reasons things out for himself; sees logical and common sense answers. ____(8)

9. Becomes absorbed and truly involved in certain topics or problems; is persistent in seeking task completion. (It is sometimes difficult to get him to move on to another topic). ____(9)

10. Is easily bored with routine tasks. ____(10)

11. Needs little external motivation to follow through in work that initially excites him. ____(11)

12. Strives toward perfection; is self critical; is not easily satisfied with his own speed or products. ____(12)

13. Prefers to work independently; requires little direction from teachers. ____(13)

14. Is interested in many "adult" problems such as religion, politics, sex, race -- more than usual for age level. ____(14)

15. Often is self assertive (sometimes even aggressive); stubborn in his beliefs. ____(15)

16. Likes to organize and bring structure to things, people, and situations. ____(16)

17. Is quite concerned with right and wrong, good and bad; often evaluates and passes judgements of events, people, and things. ____(17)

18. Displays a great deal of curiosity about many things; is constantly asking questions about anything and everything. ____(18)

19. Generates a large number of ideas or solutions to problems and questions; often offers unusual ("way out"), unique, clever responses. ____(19)

20. Is uninhibited in expressions of opinion; is sometimes radical and spirited in disagreement; is tenacious. ____(20)

21. Is a high risk taker; is adventurous and speculative. ____(21)

22. Displays a good deal of intellectual playfulness; fantasizes; imagines ("I wonder what would happen if . . . "); manipulates ideas (i.e., changes, elaborates upon them); is often concerned with adopting, improving, and modifying institutions, objects, and systems. ____(22)

23. Displays a keen sense of humor and sees humor in situations that may not appear to be humorous to others. ____(23)

24. Is unusually aware of his impulses and more open to the irrational in himself (freer expression of feminine interest for boys, greater than usual amount of independence for girls); shows emotional sensitivity. ____(24)

25. Is sensitive to beauty; attends to aesthetic characteristics of things. ____(25)

26. Is nonconforming; accepts disorder, is not interested in details; ____(26a)

is individualistic; does not fear being different; ____(26b)

27. Criticizes constructively; is unwilling to accept authoritarian pronouncements without critical examination. ____(27)

28. Carries resonsibility well; can be counted on to do what he has promised and usually does it well. ____(28)

29. Is self confident with children his own age as well as adults; seems comfortable when asked to show his work to the class. ____(29)

30. Seems to be well liked by his classmates. ____(30)

31. Is cooperative with teachers and classmates; tends to avoid bickering and is generally easy to get along with. ____(31)

32. Can express himself well; has good verbal facility and is usually well understood. ____(32)

33. Adapts readily to new situations; is flexible in thought and action and does not seem disturbed when the normal routine is changed. ____(33)

34. Seems to enjoy being around other people; is sociable and prefers not to be alone. ____(34)

35. Tends to dominate others when they are around; generally directs the activity in which he is involved. ____(35)

36. Participates in most social activities connected with the school; can be counted on to be there if anyone is. ____(36)

37. Excels in athletic activities; is well coordinated and enjoys all sorts of athletic games. ____(37)

The following statements apply to the reading class and its activities. These statements can be handled in the same manner as the previous ones, i.e., respond to each one with 1, 2, 3, 4, 5, or 6, depending upon how often you observe the trait in the student.

1. The student exhibits a strong desire to come to the reading circle or to have reading instruction take place. ____

2. The student is enthusiastic and interested in participation once he comes to the reading circle or the reading class begins. ____

3. The student asks permission or raises his hand to read orally. ____

4. When called upon to read orally, the student eagerly does so. ____

5. Contributions in the way of voluntary discussions are made by the student in the reading class. ____

6. The student expresses a desire to be read to by you (the teacher) or someone else, and he attentively listens while this is taking place. ____

7. The student makes an effort to read printed materials on bulletin boards, charts, or other displays having writing on them. ____

8. The student elects to read a book when the class has permission to choose a "free-time" activity. ____

9. The student discusses with you (the teacher) or members of the class those items he has read from the newspaper, magazines, or similar materials. ____

10. The student expresses genuine interest in going to the school's library. ____

11. The student voluntarily and enthusiastically discusses with others the book he has read or is reading. ____

12. The student very willingly answers a question asked him in the reading class. ____

13. The student listens attentively while other students share their reading experiences with the group. ____

14. The student expresses eagerness to read printed materials in the content areas. ____

15. The student goes beyond the textbook or usual reading assignment in searching for other materials to read. ____

16. The student contributes to group discussions that are based on reading assignments made in the content areas. ____

APPENDIX F_5

"TEACHER RATINGS" (Smith, 1969), OR
TEACHER QUESTIONNAIRE

In the following items, please circle a number to indicate the extent to which the child possesses the quality described. For example, "3" would indicate that the child possesses the characteristic about half of the time, or about average. A "5" or "1" would indicate that the child possesses the characteristic nearest the "5" or "1", almost all of the time. A "4" or "2" indicates that he would have that characteristic a good deal of the time.

1. Ability to work at tasks independently after directions are given:

very independent	5	4	3	2	1	not independent

2. His (or her) estimation of own abilities:

very realistic	5	4	3	2	1	unrealistic

3. Ability to react constructively to frustration:

very constructive	5	4	3	2	1	not constructive

4. Desire for praise by adults:

high desire	5	4	3	2	1	low desire

5. Ability to postpone gratification:

not demanding of immediate satisfaction	5	4	3	2	1	demands immediate satisfaction

6. Need for affection from teacher:

great need	5	4	3	2	1	slight need

7. General competitiveness:

very competitive	5	4	3	2	1	not competitive

8. Ability to concentrate and maintain attention on work:

very good concentration	5	4	3	2	1	poor concentration

9. Popularity with fellow students:

very popular	5	4	3	2	1	not popular

10. Initiative and resourcefulness:

develops own ideas, projects, and goals	5	4	3	2	1	does not develop own ideas, projects and goals

11. Desire to do well in schoolwork:

strong desire to do well	5	4	3	2	1	no desire to do well

12. General aggressiveness toward other children:

frequently aggressive	5	4	3	2	1	rarely aggressive

13. General aggressiveness toward the teacher:

frequently aggressive	5	4	3	2	1	rarely aggressive

14. Pride in accomplishment:

very pleased when he does something well	5	4	3	2	1	indifferent when he does something well

15. Need for emotional support:

seeks reassurance when in difficulty	5	4	3	2	1	almost never comes to teacher for reassurance

16. Frequency of asking for help with schoolwork:

very frequently	5	4	3	2	1	infrequently

17. Ability in written assignments to use language in a fresh and imaginative way:

very
imaginative 5 4 3 2 1 unimaginative

18. How does this child respond to failure: (Check as many as apply):

( ) with anger
( ) with shame
( ) with indifference
( ) with a desire to improve
( ) by avoiding the activity the next time
( ) other (please describe)________________________

19. How does this child respond to criticism by adults?

( ) with anger
( ) with shame
( ) with indifference
( ) with a desire to please
( ) with a desire to improve
( ) by avoiding the activity the next time
( ) other (please describe) ________________________

Please circle a number for each item below to indicate the extent to which the child possesses the quality described:

Extent Child Possesses the Quality

		very great		moderate		very slight
20.	being friendly with other children:	5	4	3	2	1
21.	being a leader with other children:	5	4	3	2	1
22.	being able to carry out reasonably difficult tasks on his own without assistance or guidance:	5	4	3	2	1
23.	being explorative and curious:	5	4	3	2	1
24.	being able to make his own decisions:	5	4	3	2	1
25.	sticking with a task within his range of ability until he completes it:	5	4	3	2	1
26.	trying to improve his performance at various skills he has learned:	5	4	3	2	1
27.	being stubborn:	5	4	3	2	1
28.	trying new things on his own:	5	4	3	2	1
29.	standing up for his own rights with other children	5	4	3	2	1
30.	controlling his emotions and impulses:	5	4	3	2	1

		Extent Child Possesses the Quality				
		very great		moderate		very slight
31.	being well organized	5	4	3	[✓ 2]	1

APPENDIX G

PARENT SOURCE

APPENDIX G_1

PARENT INTERVIEW

1. When was __________ born?

2. How many other children are there in the family? (list by name and age):

3. Which schools did __________ attend?

   (a) Nursery school:

   (b) Kindergarten:

   (c) First grade:

   (d) Other grades:

4. How did __________ feel about school before he started?

5. What was __________'s attitude toward school during the first month?

6. The first day in school is certainly an important one for a child. But it is also an important one for the parents. What were your thoughts and feelings about __________ starting school?

7. Has __________ gone to Sunday School, or any other classes outside of school?

8. At some time or other children say, "I don't want to go to school today." How do you handle this? How often has this happened? What were the reasons?

9. Often a child has some habits that a parent would like to see changed, and the parent hopes that going to school will help this change along. What about __________?

10. Did you notice any important change in __________ during his first year of school? What do you think were the reasons for this?

11. What can you say about how __________ got along with the teacher in grade one?

12. How did __________ get along with the other children in the class? Did he make new friends? Were there children with whom ____________ did not get along well? Were there children with whom you did not want him to associate?

13. Children usually have some complaints about school such as the teacher, the children, what they do, or the school itself. Do you remember what __________'s complaints were during the first year?

14. How many times during that first year did you talk to __________'s teacher? Were any of the discussions about problems with __________?

15. Often some children worry about how well they do in school. In that first year did __________ ever say or do anything that made you think that he worried about how he was doing in school?

16. How much attention do you think the teacher should pay to reading in the first year?

17. Did you read with __________ in grade one? How often? How much?

18. Of all the things that happen in school, which part would you say __________ liked best?

19. What was it about school that __________ liked least?

20. How does __________ get along with his present teacher in comparison to the teachers he had before?

21. How does __________ get along with the children in his class now?

22. Since his first year in school, what kinds of complaints has __________ had about school?

23. About reading, would you say __________ had:

( ) no trouble at all learning to read
( ) some trouble
( ) a lot of trouble

24. When __________ goes to school, would you say:

( ) he likes going to school
( ) he's neither happy nor sad about going to school
( ) he'd probably rather not go to school
( ) it's hard to tell how he feels about that

25. When __________ comes home from school, how much does he tell you about what has gone on in class?

( ) he tells a lot
( ) he tells a little
( ) he says nothing

(If the answer is a lot or a little, can you give me an idea of what he would say? If the answer is nothing, why do you think he would not talk about school? Has he always been this way?)

26. Has __________ had any unusual illnesses?

27. Has __________ been out of school for a while for any reason?

28. How frequently does __________ bring home work he has done in class?

29. How does __________ feel about homework? Do you ever help him?

30. What do you do if __________ does no homework?

31. Do you think __________ has learned:

( ) more than you expected of him
( ) as much as you expected of him
( ) less than you expected of him

32. What is the one thing about __________ that you admire most?

33. What is the one thing about __________ that you admire least?

34. What would you say are the things -- the events, happenings -- that really make __________ happy?

35. In general, when he is angry, he:

( ) gets sulky and silent
( ) hits people
( ) throws things
( ) talks angrily

36. What rules do you have for __________ watching TV or going to the movies?

37. What rules do you have for __________ reading books? (either the nature of books or the frequency and duration of reading):

38. How much has __________ been influenced by how other children think and act?

39. Some people believe that from an early age parents should let children make up their minds as much as possible. Other people believe that children do not know what is best for them and should not be allowed to make their own decisions. How do you feel about it?

40. I have here a list of things that sometimes frighten children. Could you tell me if __________ is afraid of any of these things?

( ) lightning and thunder
( ) being left alone
( ) elevators or escalators
( ) high places (looking out)
( ) seeing blood
( ) the dark
( ) animals
( ) being spanked or punished by the parents
( ) getting lost
( ) getting sick
( ) certain radio or TV programs or movies
( ) not being liked
( ) certain kinds of people
( ) new situations

41. When you think of the future, how much education would you like __________ to have?

42. Parents usually have some ideas about the kind of work they would like their child to do. What ideas have you had about the kind of work you would like __________ to do?

43. Did you have as much education as you wanted?

44. What is the husband's occupation?

45. What is the wife's occupation?

46. What languages are spoken around the house, and is __________ exposed to any other language besides English?

47. Some people have said that too much importance is placed in school on getting good grades and this makes children tense and nervous. Other people have said that if you don't make getting good grades important children will not do their best. How do you feel about this?

48. Do you believe in the saying, "Spare the rod and spoil the child?" or do you feel that no useful purpose can be served by spanking or punishing the child?

49. How interested would you say that __________ is in reading books?

50. What kinds of books does __________ read?

51. What kinds of books does the father read:

52. What kinds of books does the mother read:

53. Why would you say __________ is interested in books?

54. How often do you read? (to yourselves? to your children? duration of reading? frequency of reading?)

55. How large a library do you have in the house? (types of books and magazines in the library, or types of magazines that you subscribe to)

56. Do you take books out from the public libraries? How many? How often?

57. How often and how many books does __________ take out?

58. What kinds of activities do you share together with __________?

59. Do you have any religious affiliation?

60. Why is reading important to you?

APPENDIX G_2

PARENTAL QUESTIONNAIRE

Here is a list of words used to describe people. As you can see, the words are paired off into opposites, and sometimes the words are defined further. Can you decide where your child is in terms of each pair? Between each two words are the numbers 3 2 1 1 2 3. Decide which of the two words describes him better and circle one of the three numbers next to that word as follows:

1 a little more on this side
2 definitely on this side
3 very much on this side

(Compared with children of his age)

Tall 3 2 1 1 2 3 Short

If your child is very tall, you would circle the 3 right next to the word "tall", if he were a little on the short side you would circle the 1 closest to the word "short", and so on, circling one number for each pair of words.

1.	Immature	3	2	1	1	2	3	Mature
	(acts younger than age)							(acts grown up)
2.	Sociable	3	2	1	1	2	3	Withdrawn
	(hates play alone)							(enjoys play alone)
3.	Anxious	3	2	1	1	2	3	Unanxious
	(nervous, worries)							(not nervous or worried)
4.	Pessimistic	3	2	1	1	2	3	Optimistic
	(expects the worst)							(expects the best)
5.	Responsible	3	2	1	1	2	3	Avoids responsibility
	(trust to do what is told)							

6.	Aggressive (fights)	3	2	1	1	2	3	Submissive (avoids fights, not aggressive)
7.	Feels superior	3	2	1	1	2	3	Feels inferior
8.	Hide feelings	3	2	1	1	2	3	Shows feelings
9.	Active (busy, uses energy)	3	2	1	1	2	3	Inactive (physically quiet)
10.	Tense	3	2	1	1	2	3	Relaxed
11.	Neat and orderly	3	2	1	1	2	3	Messy and cluttered
12.	Follows others (imitates)	3	2	1	1	2	3	Leads others (is imitated)
13.	Stubborn	3	2	1	1	2	3	Not stubborn
14.	Dependent	3	2	1	1	2	3	Independent
15.	Generous	3	2	1	1	2	3	Selfish
16.	Ambitious (always tries to be on top)	3	2	1	1	2	3	Unambitious (doesn't try to be on top)
17.	Saves	3	2	1	1	2	3	Does not save
18.	Excitable	3	2	1	1	2	3	Depressed (quiet, doesn't get excited)
19.	Eats very little	3	2	1	1	2	3	Eats very much
20.	Indoor type	3	2	1	1	2	3	Outdoor type
21.	Affectionate	3	2	1	1	2	3	Unaffectionate
22.	Adapts to changes	3	2	1	1	2	3	Set in his ways

23.	Impulsive (doesn't plan with care)	3	2	1	1	2	3	Plans with care
24.	Sensitive (easily upset)	3	2	1	1	2	3	Not sensitive (not easily upset)
25.	Takes blame (admits errors)	3	2	1	1	2	3	Blames others (doesn't admit errors)

Parents have different ideas about how important it is for a child to have each of the qualities described below. Would you indicate for the items listed the extent to which you feel it is important for your child to possess each of the qualities.

	Degree of Importance				
	very important		moderately important		very unimportant
1. being friendly with other children:	5	4	3	2	1
2. being obedient to parents:	5	4	3	2	1
3. doing his best at tasks:	5	4	3	2	1
4. being a leader with other children:	5	4	3	2	1
5. being resourceful:	5	4	3	2	1
6. being able to carry out reasonably difficult tasks on his own without assistance or guidance:	5	4	3	2	1
7. being creative:	5	4	3	2	1
8. being self-reliant:	5	4	3	2	1
9. being explorative and curious:	5	4	3	2	1
10. being skillful at athletic activities:	5	4	3	2	1
11. being able to make his own decisions:	5	4	3	2	1
12. sticking with a task within his range of ability until he completes it:	5	4	3	2	1

Degree of Importance

		very important		moderately important		very unimportant
13.	trying to improve his performance at various skills he has learned:	5	4	3	2	1
14.	being stubborn:	5	4	3	2	1
15.	trying new things on his own:	5	4	3	2	1
16.	taking pride in doing things well:	5	4	3	2	1
17.	doing well in competitive games:	5	4	3	2	1
18.	standing up for his own rights with other children:	5	4	3	2	1
19.	thinking of things to do without asking for suggestions:	5	4	3	2	1
20.	controlling his emotions and impulses:	5	4	3	2	1
21.	being able to do well in school:	5	4	3	2	1
22.	learning to read well:	5	4	3	2	1
23.	reading many books:	5	4	3	2	1

APPENDIX G$_3$

MOTHER'S QUESTIONNAIRE (Coopersmith, 1967)

Indicate your opinion by drawing a circle around the "A" if you strongly agree, around the "a" if you mildly agree, around the "d" if you mildly disagree, and around the "D" if you strongly disagree. If you have any ideas which you feel should be included, jot them down at the end. Try to give your first reaction. If you read and reread the statements, it may be confusing and time-consuming.

There are no right or wrong answers, so answer according to your own opinion. Try to answer all of the questions. Many of the statements will seem alike but are necessary to show slight differences of opinion.

	Agree		**Disagree**	
1. Children should be allowed to disagree with their parents if they feel their own ideas are better.	A	a	d	D
2. It's best for the child if he never gets started wondering whether his mother's views are right.	A	a	d	D
3. Parents should adjust to the children some, rather than always expecting the children to adjust to the parents.	A	a	d	D
4. Parents must earn the respect of their children by the way they act.	A	a	d	D
5. Children would be happier and better behaved if parents would show an interest in their affairs.	A	a	d	D
6. Some children are just so bad they must be taught to fear adults for their own good.	A	a	d	D
7. Children will get on any woman's nerves if she has to be with them all day.	A	a	d	D
8. One of the worst things about taking care of a home is a woman feels that she can't get out.	A	a	d	D

		Agree		Disagree	
9.	If you let children talk about their troubles they end up complaining even more.	A	a	d	D
10.	There is nothing worse for a young mother than being alone while going through her first experience with a baby.	A	a	d	D
11.	Most children are toilet trained by 15 months of age.	A	a	d	D
12.	The sooner a child learns to walk the better he's trained.	A	a	d	D
13.	A child will be grateful later on for strict training.	A	a	d	D
14.	A mother should make it her business to know everything her children are thinking.	A	a	d	D
15.	A good mother should shelter her child from life's little difficulties.	A	a	d	D
16.	There are so many things a child has to learn in life there is no excuse for him sitting around with time on his hands.	A	a	d	D
17.	Children should be encouraged to tell their parents about it whenever they feel family rules are unreasonable.	A	a	d	D
18.	A parent should never be made to look wrong in a child's eyes.	A	a	d	D
19.	Children are too often asked to do all the compromising and adjustment and that is not fair.	A	a	d	D
20.	As much as is reasonable, a parent should try to treat a child as an equal.	A	a	d	D
21.	Parents who are interested in hearing about their children's parties, dates, and fun help them grow up right.	A	a	d	D

Agree Disagree

22. It is frequently necessary to drive the mischief out of a child before he will behave. A a d D

23. Mothers very often feel that they can't stand their children a moment longer. A a d D

24. Having to be with children all the time gives a woman the feeling her wings have been clipped. A a d D

25. Parents who start a child talking about his worries don't realize that sometimes it's better to just leave well enough alone. A a d D

26. It isn't fair that a woman has to bear just about all the burden of raising children by herself. A a d D

27. The earlier a child is weaned from its emotional ties to its parents the better it will handle it's own problems. A a d D

28. A child should be weaned away from the bottle or breast as soon as possible. A a d D

29. Most young mothers are bothered more by the feeling of being shut up in the home than by anything else. A a d D

30. A child should never keep a secret from his parents. A a d D

31. A child should be protected from jobs which might be too tiring or hard for him. A a d D

32. Children who don't try hard for success will feel that they have missed out on things later on. A a d D

33. A child has a right to his own point of view and ought to be allowed to express it. A a d D

Agree **Disagree**

34. Children should never learn things outside the home which make them doubt their parents' ideas. A a d D

35. There is no reason parents should have their own way all the time, any more than that children should have their own way all the time. A a d D

36. Children seldom express anything worthwhile; their ideas are usually unimportant. A a d D

37. If parents would have fun with their children the children would be more apt to take their advice. A a d D

38. A wise parent will teach a child early just who is boss. A a d D

39. It's a rare mother who can be sweet and eventempered with her children all day. A a d D

40. Children should be taught how to read even before they go to regular school. A a d D

41. Children pester you with all their little upsets if you aren't careful from the first. A a d D

42. A wise woman will do anything to avoid being by herself before and after a new baby. A a d D

43. Children's grades in school are a reflection of the intelligence of their parents. A a d D

44. It is more effective to punish a child for not doing well than to reward him for succeeding. A a d D

45. Children who are held to firm rules grow up to be the best adults. A a d D

46. An alert parent should try to learn all her child's thoughts. A a d D

		Agree		Disagree	
47.	Children should be kept way from all hard jobs which might be discouraging.	A	a	d	D
48.	Parents should teach their children that the way to get ahead is to keep busy and not waste time.	A	a	d	D
49.	A child's ideas should be seriously considered in making family decisions.	A	a	d	D
50.	The child should not question the thinking of the parents.	A	a	d	D
51.	No child should ever set his will against that of his parents.	A	a	d	D
52.	Children should fear their parents to some degree.	A	a	d	D
53.	When you do things together, children feel close to you and can talk easier.	A	a	d	D
54.	Children need some of the natural meanness taken out of them.	A	a	d	D
55.	Raising children is a nerve-wracking job.	A	a	d	D
56.	One of the bad things about raising children is that you aren't free enough of the time to do just as you like.	A	a	d	D
57.	The trouble with giving attention to children's problems is they usually just make up a lot of stories to keep you interested.	A	a	d	D
58.	Most women need more time than they are given to rest up in the home after going through childbirth.	A	a	d	D
59.	A child never sets high enough standards for himself.	A	a	d	D
60.	When a child does something well we can start setting his sights higher.	A	a	d	D

Agree **Disagree**

61. Learning to read is the most important thing for the child to learn in school. A a d D

62. It is a mother's duty to make sure she knows her child's innermost thoughts. A a d D

63. I liked my child best when I could do everything for him. A a d D

64. The sooner a child learns that a wasted minute is lost forever, the better off he will be. A a d D

65. When a child is in trouble he ought to know he won't be punished for talking about it with his parents. A a d D

66. Parents should be careful lest their children choose the wrong friends. A a d D

67. A child should always accept the decision of his parents. A a d D

68. Children should do nothing without the consent of their parents. A a d D

69. Children should have a say in the making of family plans. A a d D

70. It is sometimes necessary for the parent to break the child's will. A a d D

71. It's natural for a mother to "blow her top" when children are selfish and demanding. A a d D

72. A young mother feels "held down" because there are lots of things she wants to do while she is young. A a d D

73. Children should not annoy their parents with their unimportant problems. A a d D

74. Taking care of a small baby is something that no woman should be expected to do all by herself. A a d D

		Agree		Disagree	
75.	Some children don't realize how lucky they are to have parents setting high goals for them.	A	a	d	D
76.	If a child is pushed into an activity before he is ready, he will learn that much earlier.	A	a	d	D
77.	Unless one judges a child according to strict standards, he will not be industrious.	A	a	d	D
78.	It is a parent's business to know what a child is up to all the time.	A	a	d	D
79.	Children are better off if their parents are around to tell them what to do all the time.	A	a	d	D
80.	A child should be rewarded for trying even if he does not succeed.	A	a	d	D

APPENDIX H

PEER SOURCE

APPENDIX H

TELL ME WHO

1. My name is ____________________.

2. My best friend in the class is____________________.

3. I would like to sit near these three students:

   (1)

   (2)

   (3)

4. I would not like to sit near these three students:

   (1)

   (2)

   (3)

5. Who do you think is the smartest in the class?

6. Who do you think is the leader in the class?

7. Who do you think is the best in arithmetic in the class?

8. Who do you think is the best in reading in the class?

9. Who do you think reads the most books in the class?

10. If you have a problem, who would you like to talk to in the class about it?

11. Who do you think likes school the best in the class?

12. Who do you think likes reading the best in the class?

APPENDIX IV

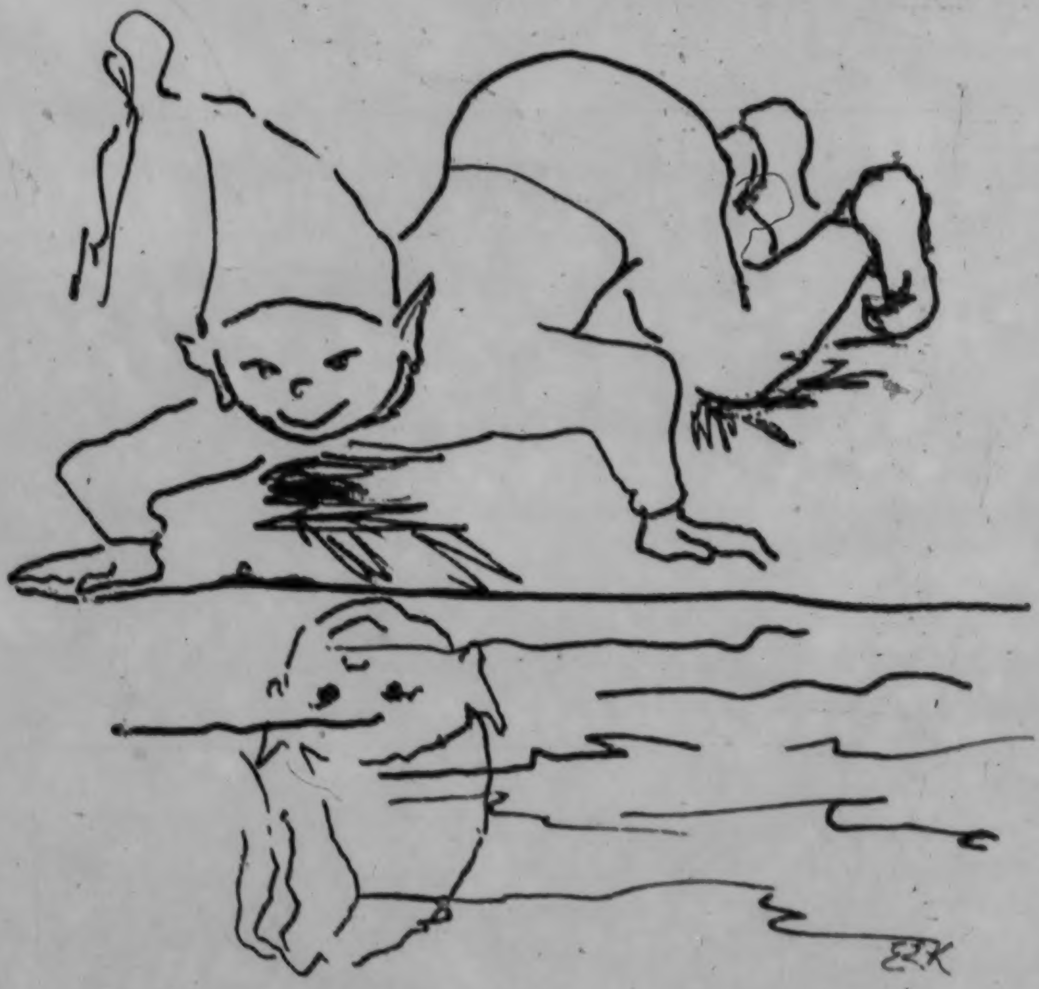
CREATIVITY ASSESSMENT

APPENDIX J

TORRANCE TESTS OF CREATIVITY (Torrance, 1966)

Activities 1-3: ASK-AND-GUESS

The first three activities will be based on the drawing below. These activities will give you a chance to see how good you are at asking questions to find out things that you don't know and in making guesses about possible causes and consequences of happenings. Look at the picture. What is happening? What can you tell for sure? What do you need to know to understand what is happening, what caused it to happen and what will be the result?



The following activities were typed on 3 x 5 inch index cards. Students' responses were made on separate answer sheets; an example response sheet is also given.

Activity 1. ASKING

On the page which is given to you, write out all of the questions you can think of about the picture. Ask all of the questions you would need to ask to know for sure what is happening. Do not ask questions which can be answered just by looking at the drawing. You can look at the drawing as much as you want to.

Activity 2. GUESSING CAUSES

On the page which is given to you, list as many possible causes as you can of the action shown in the picture. You may use things that might have happened just before the things that are happening in the picture, or something that happened a long time ago that made these things happen. Make as many guesses as you can. Don't be afraid to guess.

Activity 3. GUESSING CONSEQUENCES

On the page which is given to you, list as many possibilities as you can of what might happen as a result of what is taking place in the picture. You may use things that might happen right afterwards or things that might happen as a result long afterwards in the future. Make as many guesses as you can. Don't be afraid to guess.

Activity 4. PRODUCT IMPROVEMENT[1]

In the middle of this page is a sketch of a stuffed toy elephant of the kind you can buy in most dime stores for about one to two dollars. It is about six inches tall and weighs about a half pound. On the page which is given to you, list the cleverest, most interesting and unusual ways you can think of for changing this toy elephant so that children will have more fun playing with it. Do not worry about how much the change would cost. Think only about what would make it more fun to play with as a toy.

---

[1] An actual stuffed toy elephant was displayed to the students.

Activity 5. UNUSUAL USES

Most people throw their empty cardboard boxes away, but they have thousands of interesting and unusual uses. On the page which is given to you, list as many of these interesting and unusual uses as you can think of. Do not limit yourself to any one size of box. You may use as many boxes as you like. Do not limit yourself to the uses you have seen or heard about; think about as many possible new uses as you can.

Activity 6. UNUSUAL QUESTIONS

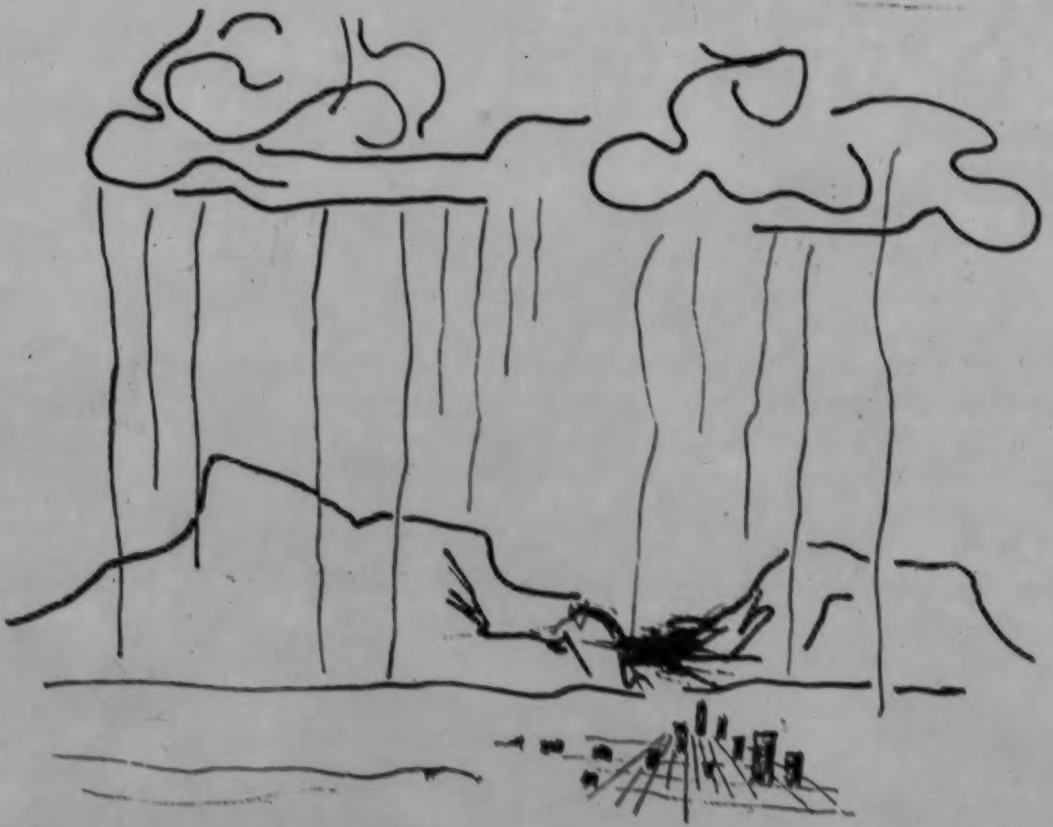
In this activity, you are to think of as many questions as you can about cardboard boxes. These questions should lead to a variety of different answers and might arouse interest and curiosity in others concerning boxes. Try to think of questions about aspects of cardboard boxes which people do not usually think about.

Activity 7. JUST SUPPOSE

You will now be given an improbable situation -- one that will probably never happen. You will have to just suppose that it has happened. This will give you a chance to use your imagination to think out all of the other exciting things that would happen IF this improbable situation were to come ture.

In your imagination, just suppose that the situation described were to happen. THEN think of all of the other things that would happen because of it. In other words, what would be the consequences? Make as many guesses as you can.

The improbable situation -- JUST SUPPOSE clouds had strings attached to them which hang down to earth. What would happen? List your ideas and guesses on the next page.



SAMPLE RESPONSE SHEET

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________
11. ______________________________
12. ______________________________
13. ______________________________
14. ______________________________
15. ______________________________
16. ______________________________
17. ______________________________
18. ______________________________
19. ______________________________
20. ______________________________
21. ______________________________
22. ______________________________
23. ______________________________
24. ______________________________
25. ______________________________

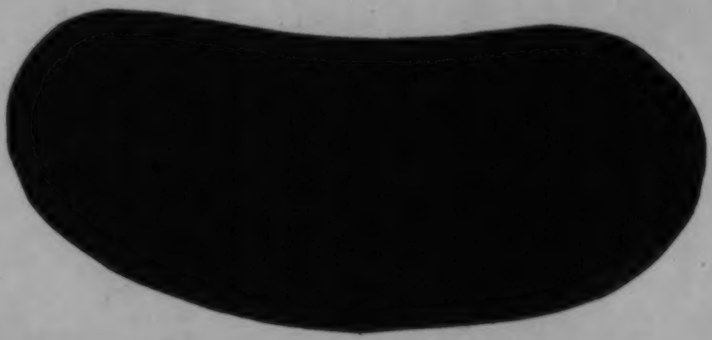
FIGURAL FORM A

ACTIVITY 1: PICTURE CONSTRUCTION

Below is a piece of colored paper in the form of a curved shape. Think of a picture or an object which you can draw with the piece of paper as a part. On the back of these shapes you will find a thin layer of paper that can be peeled away. Look. Now you can stick your colored shape wherever you want to make the picture you have in mind. Stick yours on the next page where you want it and press down on it. Then add lines with your pencil or crayon to make your picture.

Try to think of a picture that no one else will think of. Keep adding new ideas to your first idea to make it tell as interesting and as exciting a story as you can.

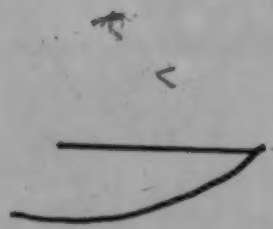
When you have completed your picture, think up a name or title for it and write it at the bottom of the page in the space provided. Make your title as clever and unusual as possible. Use it to help tell your story.



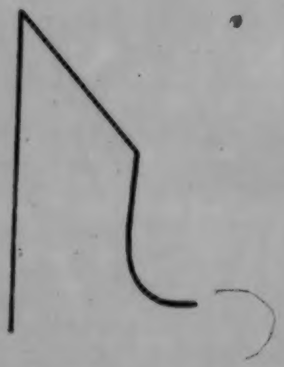
YOUR TITLE: ____________________

ACTIVITY 2: PICTURE COMPLETION

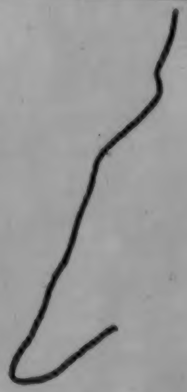
By adding lines to the incomplete figures on this and the next page, you can sketch some interesting objects or pictures. Again, try to think of some picture or object that no one else will think of. Try to make it tell as complete and as interesting a story as you can by adding to and building up your first idea. Make up an interesting title for each of your drawings and write it at the bottom of each block next to the number of the figure.



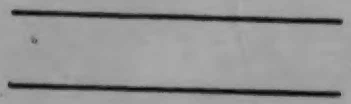
1 ____________________



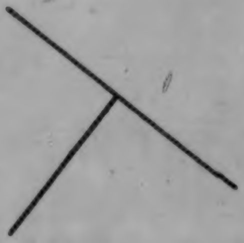
2 ____________________



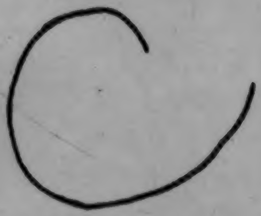
3 ____________________



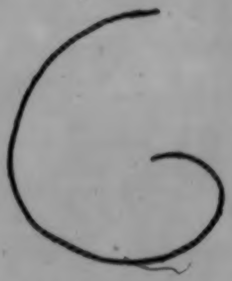
4 ____________________



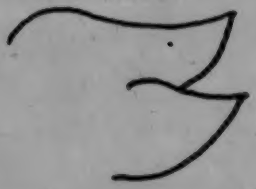
5 ______________________________



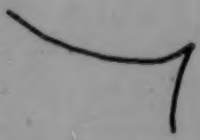
6 ______________________________



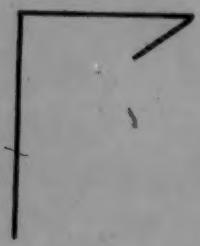
7 ______________________________



8 ______________________________



9 ______________________________



10 ______________________________

ACTIVITY 3: CIRCLES

In ten minutes see how many objects or pictures you can make from the circles below and on the next page. The circles should be the main part of whatever you make. With pencil or crayon add lines to the circles to complete your picture. You can place marks inside the circles, outside the circles, or both inside and outside the circles -- wherever you want to in order to make your picture. Try to think of things that no one else will think of. Make as many different pictures or objects as you can and put as many ideas as you can in each one. Make them tell as complete and as interesting a story as you can. Add names or titles below the objects.